This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

3 6105 127 795 909

STANFORD UNIVERSITY LIBRARIES

LELAND STANFORD JUNIOR UNIVERSITY ORGANIZED 1891

STANFORD UNIVERSITY LIBRARIES

LELAND STANFORD JUNIOR UNIVERSITY ORGANIZED 1891

INDEX

TO THE

MISCELLANEOUS DOCUMENTS

OF THE

HOUSE OF REPRESENTATIVES

FOR THE

FIRST SESSION OF THE FORTY-EIGHTH CONGRESS,

1883-'84.

IN FORTY VOLUMES.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1884.

LIBRARY
OF THE
LELAND STANFORD JUNIOR
UNIVERSITY.

A.7637.

INDEX TO HOUSE MISCELLANEOUS DOCUMENTS.

CONTENTS OF THE VOLUMES.

VOL. 1..Nos. 1 to 15 inclusive, except Nos. 4 and 12.
VOL. 2..No. 4, part 1.
VOL. 3..No. 4, part 2.
VOL. 4..No. 12, part 1.
VOL. 5..No. 12, part 2.
VOL. 6..No. 12, part 3.
VOL. 7..No. 12, part 4.
VOL. 8..No. 16.
VOL. 9..Nos. 17 to 29 inclusive.
VOL. 10..Nos. 20 to 24 inclusive.
VOL. 11..No. 25, part 1.
VOL. 12..No. 25, parts 2 and 3.
VOL. 13..No. 26.
VOL. 14..No. 27, part 1.
VOL. 15..No. 27, part 2.
VOL. 16..Nos. 28 to 31 inclusive.
VOL. 17..No. 32.
VOL. 18..No. 33.
VOL. 19..Nos. 34 to 50 inclusive, except Nos. 35, 38, 41, 46, 47, and 49.
VOL. 20..Nos. 35 and 41.
VOL. 21..No. 38, part 1.
VOL. 22..Nos. 38, vol. 2, 38 pt. 2 and 38 pt. 3.
VOL. 23..Nos. 46, 47, and 58.
VOL. 24..No. 49 and parts.
VOL. 25..Nos. 51 to 64 inclusive, except Nos. 58, 56, and 60.
VOL. 26..No. 56.
VOL. 27..No. 60.
VOL. 28..No. 65, part 1.
VOL. 29..No. 65, part 2.
VOL. 30..No. 65, part 3.
VOL. 31..No. 66.
VOL. 32..No. 67.
VOL. 33..No. 68.
VOL. 34..No. 69.
VOL. 35..No. 70.
VOL. 36..No. 71.
VOL. 37..No. 72.
VOL. 38..No. 73.
VOL. 39..No. 74.
VOL. 40..No. 75.

INDEX TO THE DOCUMENTS.

Subject.	Vol.	No.	Part.
A.			
Aguero, Señor Carlos, relative to imprisonment and extradition of.	19	34	
Allen, Thomas, memorial addresses on the life and character of ..	23	47	
American Coaster's Nautical Almanac, first edition for 1884	20	41	
American Ephemeris, first edition for 1887	20	35	
Animals, letter from Secretary of the Treasury relative to the foot-and-mouth disease in Great Britain	19	40	
Appropriations, statement showing appropriations made during the first session of the Forty-eighth Congress	25	64	
B.			
Blue Book. (*See* OFFICIAL REGISTER.)			
Botkins, A. C., contested election case against Maginnis	19	42	
Broadhead, James O., contestee in election case of McLean against Broadhead	16	29	
Brooklyn, N. Y., relative to purchase of site for a public building at	25	59	
Butter. (*See* OLEOMARGARINE.)			
C.			
Campbell, J. E., contested-election case against H. L. Morey ..	11	25	1
	12	25	2
	12	25	3
Census, letter from Superintendent of, submitting report of J. D. Weeks, agent in charge of statistics of wages and manufacturing industries	10	20	

Subject.	Vol.	No.	Part.
Central Pacific Railroad Company, letter from the Commissioner of Railroads relative to the indebtedness to the Government of the	19	44	
Chalmers, J. R., contested-election case against V. H. Manning	1	15	2
Chief Justice United States Supreme Court, letter requesting appropriation for printing records of said court	1	7	
Claims:			
List referred to the Court of Claims	25	57	
	25	62	
Clerk of House of Representatives:			
Annual report of expenditures	1	8	
Report of expenditures from July 1, 1883 to December 3, 1883.	1	9	
Commercial Relations of the United States:			
Reports from United States consuls on the commerce manufactures, &c., of their consular districts	4	12	1
	5	12	2
	6	12	3
	7	12	4
Commissioner of Pensions, notes of a conference with the, in relation to pension laws	19	43	
Commissioner of Railroads, letter from, relative to the indebtedness to the Government of the Union and Central Pacific Railroad	19	44	
Committees, list of standing and select, in House of Representatives	1	2	
Compulsory pilotage, notes of a hearing before the Select Committee on American Shipbuilding and ship-owning interests relative to	19	37	
Consular reports from consuls relating to various matters in their districts	4	12	1
	4	12	2
	4	12	3
	4	12	4
Consuls of United States, reports on the credit and trade systems of their respective consular districts	4	12	1
	5	12	2
	6	12	3
	7	12	4
Contested-election cases:			
Botkins *vs.* Maginnes	19	42	
Campbell *vs.* Morey	11	25	1
	12	25	2
	12	25	3
Chalmers *vs.* Manning	1	15	2
Craig *vs.* Shelley	16	30	
English *vs.* Peelle	10	23	
Frederick *vs.* Wilson	10	22	
Garrison *vs.* Mayo	9	18	
McLean *vs.* Broadhead	16	29	
Manzanares *vs.* Luna	9	17	
Massey *vs.* Wise	14	27	1
	15	27	2
Pool *vs.* Skinner	10	21	
O'Ferrall *vs.* Paul	8	16	1
Wallace *vs.* McKinley	9	19	
Wood *vs.* Peters	10	24	
Craig, George A., contested-election case against Charles M. Shelley	16	30	
D.			
Department of Justice:			
Testimony taken by the Committee on Expenditures in the..	21	38	1
Testimony taken by the Committee on Expenditures, in the part 1, volume 2	22	38	1
Star-route case	22	38	2
Ottman case	32	38	3
Doorkeeper of the House of Representatives:			
Inventory of public property in possession of	1	5	
Inventory of books and public documents in the folding-room of the House	1	6	

Subject.	Vol.	No.	Part.
Dudley, W. W.:			
Notes of a conference with the Commissioner of Pensions in regard to pensions	19	43	
E.			
Education of Indians, concurrent resolution adopted by the legislature of New York relative to	19	39	
Elections, record of the chief supervisor of, for northern district of Mississippi	19	48	
Employés of Senate and House, equalization of salaries to	1	13	
English, W. E., contested-election case against S. J. Peelle	10	23	
Ephemeris, the American, for 1887	20	35	
Eulogies. (*See* MEMORIAL ADDRESSES.)			
Eureka, Nev.:			
Silver-lead deposits of	37	72	
Paleontology of the district of	38	73	
F.			
First Comptroller of the United States Treasury, decisions of the	26	56	
Fish and fisheries:			
Report of commission relative to, for 1883	32	67	
Report of commission relative to, for 1884	33	68	
Fish Commission, Annual Bulletin for 1883 from	1	11	
Foot-and-mouth disease, letter from Secretary of the Treasury relative to, in Great Britain	19	40	
Frederick, Benjamin T., contested-election case against James Wilson	10	22	
Freedman's Savings and Trust Company, annual report of commissioners	1	10	
G.			
Garrison, George T., contested-election case against R. M. Mayo	9	18	
Geological Survey:			
Report of the United States Geological Survey of the Territories by Hayden	27 35	60 70	
Bulletins of the	36	71	
Monographs of the, vol. 7	37	72	
Monographs of the, vol. 8	38	73	
Monograpes of the, vol. 9, on the Paleontology of New Jersey	39	74	
H.			
Haskell, Dudley C., memorial addresses on the life and character of	23	46	
Hayden, F. V., report of the Geological Survey of the Territories by	27 35	60 70	
Herndon, Thomas H., memorial addresses on the life and character of	23	53	
Hot Springs, Ark., testimony taken relative to Government property at	25	58	
of Representatives:			
List of members, arranged by States	1	1	
List of standing and select committees of	1	2	
Alphabetical list of Members and Delegates and the standing and select committees of which they are members	1	3	
Equalization of salaries to employés in Senate and in	1	13	
Joint rules of the Senate and	16	28	
I.			
ports—Duties:			
Compilation of foreign commodities imported and entered for consumption in the United States from 1867 to 1883 inclusive	19	49	
Indian education, concurrent resolution from New York legislature relative to	19	39	

Subject.	Vol.	No.	Part.
J.			
Jeannette inquiry, proceedings had relative to	31	66	
Joint rules. (*See* RULES.)			
L.			
Luna, T., contestee in election case of Manzanares against Luna.	9	17	
Lundburg, Charles G., memorial relating to inventions and improvements in steam-vessels	19	36	
M.			
McKinley, William, jr., contestee in election case of Wallace against McKinley	9	19	
McLean, James H., contested-election case against J. O. Broadhead	16	29	
Maginnis, Martin, contestee in election case of Botkins *vs.* Maginnis	19	42	
Manning, Van H., contestee in election case of Chalmers *vs.* Manning	1	15	2
Manzanares, F. A., contested-election case against T. Luna	9	17	
Massey, John E., contested-election case against John S. Wise.	14	27	1
	15	27	2
Mayo, Robert M., contestee in election case of Garrison against Mayo	9	18	
Members of Forty-eighth Congress:			
List arranged by States	1	1	
List of members arranged alphabetically and the standing and select committees of which they are members	1	3	
Memorial addresses:			
On the life and character of Dudley C. Haskell	23	46	
On the life and character of Thomas H. Herndon	23	53	
On the life and character of Thomas Allen	23	47	
Mineral resources of United States:			
Statistical report upon the present condition of the mining industries of the United States	40	75	
Mississippi, records of the chief supervisor of elections for the northern district of	19	48	
Mississippi River improvement, testimony taken relative to	25	52	
Morey, H. L., contestee in election case of Campbell *vs.* Morey.	11	25	1
	12	25	2
	12	25	3
N.			
National Board of Health, relative to appropriations to pay expenses of the	25	55	
National Home for Disabled Volunteer Soldiers:			
Report of Board of Managers of the	1	14	
Relative to management of	25	51	
Nautical Almanac:			
First edition for 1887	20	35	
American coasters for 1884	20	41	
New Jersey, paleontology of	39	74	
New Orleans and Pacific Railroad Company, memorial of the	25	54	
New York, concurrent resolution relative to Indian education from the legislature of	19	39	
O.			
O'Ferrall, C. T., contested election case against John Paul	8	16	1
Offices, statement showing the new ones created and the salaries thereof	25	64	
Official Register of United States:			
Giving list of officers and employés in the civil, military, and naval service on July 1, 1883	2	4	1
	3	4	2

Subject.	Vol.	No.	Part.
Oleomargarine, Committee on Agriculture instructed to investigate the manufacture and sale of	16	31	
Ottman case. (*See* DEPARTMENT OF JUSTICE.)			
P.			
Pacific Railroads. (See under head of respective corporations.)			
Paul, John, contestee in election case of O'Ferrall *vs.* Paul	8	16	1
Peelle, Stanton J., contestee in election case of English against Peelle	10	23	
Pensions, notes of a conference with Hon. W. W. Dudley, Commissioner of Pensions, in relation to laws governing	19	43	
Peters, S. R., contestee in election case of Wood against Peters	10	24	
Pilots and pilotage, notes of a hearing before the Select Committee on American Ship-building and Ship-owning Interests relative to	19	37	
Pool, C. C., contested-election case against T. G. Skinner	10	21	
Portage Lake and Lake Superior Ship-Canal Company, testimony taken in the investigation	19	50	
Public documents, Inventory of books and documents in folding-room of the House	1	6	
Pueblo of San Francisco, relative to grant of land to the	25	63	
R.			
Rules, joint, of the Senate and House of Representatives	16	28	
S.			
Salaries, equalization of, with Senate and House employés	1	13	
San Francisco, Cal., relative to grant to the Pueblo of	25	63	
Secretary of Treasury, letter relative to foot-and-mouth disease in Great Britain	19	40	
Senate:			
Equalization of salaries to employés in House, and in	1	13	
Joint rules of the House of Representatives and	16	28	
Shelley, Charles M., contestee in election case of Craig against Shelley	16	30	
Skinner, T. G., contestee in election case of Pool against Skinner.	10	21	
Smithsonian Institution, annual report relative to, for 1883	34	69	
Soldiers' Home. (*See* NATIONAL HOMES FOR DISABLED VOLUNTEER SOLDIERS.)			
Standing and select committees. (*See* COMMITTEES.)			
Star-route cases. (*See* DEPARTMENT OF JUSTICE.)			
Steam-vessel, memorial relating to inventions and improvements in, by Capt. Charles G. Lundborg	19	36	
Supervisor of elections. (*See* ELECTIONS.)			
Supreme Court of the United States, letter from the Chief Justice, asking an immediate appropriation for the printing of records in said court	1	7	
T.			
Treasury Department, decisions of the First Comptroller in the	26	56	
U.			
Union Pacific Railroad Company, letter from the Commissioner of Railroads, relative to the indebtedness to the Government of the	19	44	
Utah, protest of legislature against passage of bills inimical to the Territory of	19	45	
W.			
Wages, Week's report on, together with statistics	18	33	
Wallace, J. H., contested-election case against W. McKinley, jr.	9	19	

Subject.	Vol.	No.	Part.
War of Rebellion:			
Official record, Series I, Vol. X, Part I	13	26	
The official records of, Series I, Vol. X, Part II	17	32	
Compilation of the official record of the	28	65	1
	29	65	2
	30	65	3
Washington and Georgetown Railroad Company, letter from the president of road, transmitting the treasurer's annual report	25	61	
Weeks, Joseph D.:			
Report of, relative to statistics of wages and manufacturing industries	10	70	
Report and statistics upon wages by	18	33	3
Wilson, James, contestee in election case of Frederick against Wilson	10	22	
Wise, John S., contestee in election case of Massey against Wise.	14	27	1
	15	27	2
Wood, S. W., contested-election case against S. P. Peters	10	24	

48TH CONGRESS, } HOUSE OF REPRESENTATIVES. { MIS. DOC.
1st Session. } { No. 12.

COMMERCIAL RELATIONS OF THE UNITED STATES.

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

FOR THE MONTHS OF
JULY, AUGUST, SEPTEMBER, AND OCTOBER, 1883, AND SPECIAL REPORT
ON DECLARED EXPORTS FOR THE UNITED STATES.

PUBLISHED BY THE DEPARTMENT OF STATE, ACCORDING TO ACT OF CONGRESS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1884.

COMMERCIAL RELATIONS OF THE UNITED STATES.

# REPORTS
FROM THE
CONSULS OF THE UNITED STATES
ON THE
COMMERCE, MANUFACTURES, ETC.,
OF THEIR
CONSULAR DISTRICTS.

No. 31—July, 1883[1]

PUBLISHED BY THE DEPARTMENT OF STATE, ACCORDING TO ACT OF CONGRESS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

CONTENTS.

CONTINENT OF AFRICA.

Page.
American trade in Madagascar.. 10–13
(Reports by Vice-Consul Whitney and Consular Agent Stanwood.)

CONTINENT OF AMERICA.

The Manchester print trade of Colombia.. 33, 34
(Report by Consul Smith, of Carthagena.)
Beef cattle in Mexico and in the United States.. 39–45
(Report by Consul-General Sutton, of Matamoros.)
Commercial travelers and trade journals in South America.. 48, 49
(Report by Consul Smith, of Carthagena.)
Canadian tariff changes.. 54–56
(Report by Commercial Agent Carroll, of Port Stanley and St. Thomas.)
How Canada is governed.. 56–58
(Report by Commercial Agent Carroll.)
Exports from the River Plate to the United States.. 63–66
(Report by Consul Baker, of Buenos Ayres.)
Asphalt and asphalt trade of Cuba.. 71–76
(Report by Consul-General Badeau.)
Railroads of Venezuela.. 89–90
(Report by Consul Beach, of Puerto Cabello.)
Colombia and its people.. 111–114
(Report by Minister Scruggs.)
Patent law of Brazil.. 114–118
(Transmitted by Minister Osborn.)

CONTINENT OF ASIA.

Import of American goods into Java.. 14–18
(Report by Consul Hatfield, of Batavia.)
Indian vs. American wheat.. 19–24
(Report by Consul-General Mattson, of Calcutta.)
American plows and fanning mills for India.. 31–33
(Report by Consul-General Mattson, of Calcutta.)
New Zealand meat export.. 58–63
(Report by Consul Griffin, of Auckland.)
Manufacture of camphor in Japan.. 97, 98
(Report by Consul Jones, of Nagasaki.)
The textile trade of Singapore.. 163–169
(Report by Consul Studer.)
Cotton goods trade of Penang.. 169–174
(Report by Consular Agent Hüttenbach.)

AUSTRALASIA.

American wooden ware in New Zealand 3
(Report by Consul Griffin, of Auckland.)
British Annexation of New Guinea 174
(Report by Consul Griffin, of Auckland.)
The Island of New Guinea 176
(Report by Consul Griffin.)

CONTINENT OF EUROPE.

The Angora goat....................................
(Report by Consul-General Heap, of Constantinople.)
Consumption of American meats in Germany and France 1
(Report by Consul Steuart, of Antwerp.)
How American wheat is imported into France 2
(Report by Consul Wilson, of Nantes.)
Commercial relations between France and the United States.................. 2
(Report by Consul Peixotto, of Lyons.)
The alleged Bradford estate in Great Britain.................................... 4
(Report by Consul-General Merritt, of London.)
Prohibition of American pork in France.................................... 4
(Report by Consul Rhodes.)
German prohibition.................................... 5
(Report by Consul-General Vogeler, of Frankfort-on-the-Main)
The consequential effects of German prohibition.................................... 5
(Report by Consul Ryder, of Copenhagen.)........
Exports of Swiss silk ribbons to the United States.................................... 6
(Report by Consul Mason, of Basle.)
Exports from Geneva to the United States.................................... 6
(Report by Consul Adams.)
Exports from Lyons to the United States.................................... 7
(Report by Consul Peixotto.)
The world's silk industry.................................... 7
(Report by Consul Peixotto.)
The silk consumption of Europe.................................... 8
(Report by Consul Peixotto.)
Supply and consumption of silk in France.................................... 8
(Report by Consul Peixotto.)
European silk goods—exports 8
(Report by Consul Peixotto.)
Silk crop for 1883.................................... 8
(Report by Consul Peixotto.)
Production of silk goods in Lyons.................................... 8
(Report by Consul Peixotto.)
Falsification of French wines....................................
(Report by Consul Wilson, of Nantes.)
Resumption of specie payments in Italy.................................... 9
(Report by Consul Duncan, of Naples.)
Foreign commerce of Servia 9
(Report by Consul-General Schuyler.)
Prices in Germany 10
(Report by Consul-General Vogeler.)
Adulteration of food, drinks, and medicine.................................... 105
(Report by Consul Wilson, of Nantes.)

Page.

Artificial coloring of wines 110, 111
(Report by Consul Roosevelt, of Bordeaux.)

Dwelling-house accommodations in Glasgow 118–121
(Report by Consul Harte.)

Value of landed property in France 121, 122
(Report by Consul Peixotto.)

Farming in Belgium 122–125
(Report by Consul Tanner, of Liege.)

The world's coffee 125, 148
(Report by Consul-General Merritt, of London.)

Belgian Commercial Museums 148
(Report by Consul Wilson, of Brussels.)

St. Petersburg-Cronstadt canal 148–151
(Report by Consul-General Stanton.)

The potash industry of Stassfurt 152–154
(Report by Consul Fox, of Brunswick.)

Mill wages in Belgium 155, 156
(Report by Consul Tanner, of Liege.)

Statistics of a woolen mill at Nantes 151–158
(Report by Consul Wilson.)

Cotton manufactures in Alsace 159, 163
(Report by Consul Ballow, of Kehl.)

POLYNESIA.

Commerce and products of Samoa 98–191
(Report by Consul Canisius.)

NOTES.

Brazilian import duty on flour 182
American steamships for the Pacific trade 182
Coffee export from Brazil 182
India and the United States 182
Egyptian finances 183
Adulteration of wine and liquors in France 184
Tobacco in Germany 184
Agriculture in Hayti 184
Austria and the Boston exhibition 184
Silk trade of France 1882 185
China and Japan silk 185
Distress in the Madeira Island 186
French wine harvest of 1882 186
Condition of the crops in Europe 187, 188

II JULY 83

CONSULAR REPORTS
ON
COMMERCE, MANUFACTURES, ETC.

JULY, 1883.

THE ANGORA GOAT.

REPORT BY CONSUL-GENERAL HEAP, OF CONSTANTINOPLE, ON THE ANGORA GOAT, AND ITS IMPORTATION INTO THE UNITED STATES.

INTRODUCTORY.

In compliance with your instruction No. 104, dated the 27th of February last, I have the honor to transmit herewith a report on the Angora or mohair goat.

I am indebted for the notes upon which the report is prepared to Mr. Laurence Gregson Binns, an English merchant of old standing here, who, having been engaged for many years in the exportation of mohair, is well informed on everything relating to the Angora goat. Mr. Binns has at different times purchased and shipped large numbers of these goats to Australia and the Cape of Good Hope as well as to the United States. The report is perhaps not as complete as might be desired, but if any further information is wanted I shall be glad to renew my inquiries.

The exportation of Angora goats was prohibited by decree in 1880, and although the decree has not been repealed, I know of several lots that have been exported since it was issued; and if our minister makes the request, the Turkish Government will probably grant a special permit for the exportation of as many as may be desired.

In seasons of scarcity, which have, unfortunately, prevailed several times in the last few years, the goat has been slaughtered for food. It is probable that pasturage had become scarce and dear in consequence of drought, and that, in addition to the expense of feeding a large number of goats, the difficulty of paying the Government tax, which is collected at the worst season for the farmers—some time before the clipping commences—compelled them to slaughter their least valuable animals. As an article of food, the flesh of the Angora goat is not desirable; it resembles that of the common goat; besides, the animal is too valuable to be used for food under ordinary circumstances.

A knowledge of the climate, soil, and vegetable production of Texas, Colorado, California, Western Virginia, and Western Pennsylvania convinces me that this goat will thrive in those States, and probably equally well in other districts—indeed, wherever there are mountains and hills

1 JUL 83

for summer pasture and valleys for shelter in winter. Scrub oak, their favorite food, is plentiful in California, and the nutritious bunch grass on the eastern slopes of the Rocky Mountains will furnish them with a good and abundant pasture.

Although there can be little doubt that the Angora goat will thrive in the United States as it has done in Australia and at the Cape, its success as a commercial venture is a matter that intending importers are better able to form a judgment upon than I am. It depends upon the demand for mohair in the United States, or, if the supply exceeds the demand, whether the surplus can be exported to England, which is the largest consumer, as profitably as it is from her southern colonies.

REPORT.

THE ANGORA GOAT.

The Angora or mohair goat is a native of Asia Minor, being found in large numbers in the districts of Angora, Beypazar, Geredeh, and Castámbol, and although a few flocks exist in the adjacent districts, by far the best animals and purest breeds are confined to the four localities above mentioned.

Although in appearance the goats of these districts are easily distinguished the one from the other, yet for all practical purposes the value of the fiber produced does not differ.

The character of the wools of these districts may be classified as follows:

Angora.—A very even style of hair, fine in quality and of fair length of staple, and slightly greasy or yolky.

Beypazar.—Very clean and free from grease or yolk, containing a fair proportion of fine hair. Any lack of quality is fully compensated for by the length of staple, this district's wool being the deepest grown of any.

Geredeh.—The finest all-round quality of any district, but very greasy and yolky, and therefore wastes more when scoured. Average length of staple.

Castámbol.—Fine in quality and by far the most lustrous wools, fair length of staple and very clean, but very loose in the fleece, which does not hold together, as do the fleeces of the other districts, and, consequently, is rather wasty in the loom.

It will be seen that each district has its merits as well as drawbacks, which prevents the one district taking precedence of the others as far as the quality of the hair is concerned; but for breeding purposes the Angora, Beypazar, and Geredeh goats are to be recommended on account of the yield, which is light in the case of the Castámbol breed.

YIELD OF WOOL.

The average yield per goat in Asia Minor is about 3 pounds weight. This includes one-year old kids and poor-bred animals. At the Cape of Good Hope, where the goats are properly cared for, and to which colony none but the purest-bred animals are now exported, the yield is much greater, being from 5 to 6 pounds weight, including cross-breeds. The yield entirely depends upon the choice in the first instance of pure-bred, heavy-wooled animals, and the care bestowed upon them afterward. There are many choice goats in Asia Minor whose fleeces will weigh from 12 to 18 pounds.

FOOD OF THE GOAT.

The food of the Angora goats consists principally of scrub oak, and wherever this is to be found they thrive the best. In the absence of this, however, they will eat grass with relish, with no perceptible difference in the yield or quality of the hair; in fact, in the districts of Geredeh and Beypazar many of the flocks are fed on grass, as scrub oak is not very plentiful. They are also very fond of the bark of the pines which abound in the district of Geredeh. During the winter, if the goats cannot get at the fresh food, they are fed with dried scrub oak and hay, and a little oats is given to the animals every day; but of these animals it may be said that, in the absence of their accustomed food, they will eat almost anything, being much hardier than common goats and sheep, and not nearly so fastidious about their food.

During the summer the native flock-masters feed their goats on the highlands and hills, where they remain night and day, but in the winter they are driven to the plains, where they can be housed at night or in very severe weather. The chief risk of the breeder in Asia Minor is when a heavy fall of snow takes place, followed by a hard frost, which hardens the snow on the surface, and the goats are prevented from getting at the grass underneath, and as, in most instances, the native breeders are too poor to provide fodder for stall feeding, many thousands of goats are starved to death.

CLIMATE.

The climate is very changeable and great extremes of heat and cold are experienced. In summer the temperature varies from 70° to 100° Fah., and in winter as much as 5° to 6° below zero is sometimes registered, but the Angora goat does not suffer from these extremes.

It is during the wet seasons of spring and autumn that the Angora goat is affected, for it cannot stand damp and must be well housed during the night in the rainy season. It may be well to mention that at the Cape of Good Hope where these goats thrive well, snow is seldom or ever seen.

The four districts mentioned are all situated at an altitude varying from 2,500 to 4,500 feet above the level of the sea, Geredeh being the highest and Angora the lowest.

THE PROFITS OF GOAT-BREEDING.

The profit arising out of the industry of goat-breeding is, to the native breeder, insignificant, when compared with the profits accruing to the breeders at the Cape; not that the industry could not be made to pay as well in Asia Minor as anywhere, but for the following reasons:

1st. The breeder receives no encouragement from Government.

2d. The breeder is subject to a heavy tax of from 18 to 25 cents per goat, and as this tax is collected early in March, what appears to be a tax of 18 to 25 cents is often double, for it is during the months of March and April that the greatest mortality takes place, and thus the breeder has to pay the tax upon animals which may not survive for a month longer. The government does not take into account weak or sickly goats, but takes all indiscriminately.

3d. Not being possessed of the means of paying the tax, the breeder is obliged either to borrow money at an exorbitant rate of interest or he disposes of the mohair for delivery at the clipping season at a figure far below its market value.

4th. The breeder has to pay heavy rents for grazing lands.

5th. His poverty prevents him from making provision for the winter, and, in consequence, he loses many valuable goats.

At the cape the breeder has none of these drawbacks to contend with, and consequently his efforts are crowned with success; the export of mohair from the Cape, in 1882, being 18,000 bales as against 150 in 1865.

NATIVE MANUFACTURE.

Many years ago, previous to the introduction of mohair into Great Britain, the natives used large quantities of the article in the manufacture of dress pieces, stockings, and a material which was water-proof and used as cloaks by the wealthier people, but as these goods were all manufactured in hand-looms, they were expensive. As a better article at a much lower cost has been produced in Europe, the industry has almost disappeared from Asia Minor.

EXPORT AND PRICE OF MOHAIR.

Nearly the whole clip of Turkish mohair is shipped to Great Britain, Bradford, in Yorkshire, being the seat of manufacture. For many years the bulk of the mohair was made up into dress pieces for ladies, but in 1874 the fashion changed from lustrous or bright goods to soft woolen materials, and the demand for the raw material fell off considerably.

However, mohair was still used in the manufacture of other articles, such as railway carriage linings, imitation velvets, and, later on, imitation seal skins.

The average price of mohair for many years was *3s. 6d.* per pound, but in 1874 prices began to decline, till in 1879 it was sold in small quantities as low as *18d.* per pound, but toward the end of 1879 a sudden demand set in for imitation seal-skins and ice wools, and prices rose rapidly to *3s.* per pound. The demand, however, fell off again, and mohair declined to *22d.*, at which figure it now stands.

There is now a probability of the fashion returning to bright goods, and an article suitable for dresses has lately been produced by the celebrated firm of Messrs. Mitchell Brothers under the name of "electric" cloth, which is likely to sell, so that the raw material may advance in price again. Large quantities of mohair yarns are annually exported to France, Germany, and the United States.

THE NUMBER OF ANGORA GOATS.

The number of Angora goats in Asia Minor is computed at 2,500,000, yielding about 40,000 bales of 170 pounds each. For twenty years the annual production has varied very slightly; whereas at the Cape, where the common goat has been crossed with the Angora goat, not only has an article been produced equal to Turkish mohair, but the annual exportation of mohair has wonderfully increased, as has been already mentioned. The Cape farmer has found that the breeding of Angora goats is remunerative at even the low prices he has latterly obtained for his mohair, notwithstanding the fabulous prices paid for some of the stud rams and ewes exported to the Cape from Asia Minor, as will be seen from the annexed list.

THE KIDS.

The Angora goat in Asia Minor seldom gives birth to more than one kid, but at the Cape two kids to every ewe is the rule, and it is not uncommon for a ewe to give birth to three kids, and no doubt with proper care and attention, the result would be similar in the United States.

THE CLIPPING SEASON.

The clipping season. In Asia Minor the goats are clipped early in April. At the Cape the farmers clip twice, once in June, and again about November. The wool of the second clip, however, is short in staple, and does not realize the full value of mohair; still, it is a source of revenue to the farmer.

EXPORTATION OF GOATS.

Angora goats have been shipped in large numbers to the Cape and Australia, and in smaller numbers to the United States, but as yet the breeding of these valuable animals has not been taken up with any spirit except at the Cape. The following particulars respecting the several exportations from 1867 to 1880 will be of interest:

In 1867 the Hon. Israel Diehl came to Turkey from the United States, and, proceeding to Asia Minor in company with a competent person, purchased about 200 goats, which were then brought to Constantinople and shipped by steamer to Liverpool, and thence by sailing vessel to the United States. Very heavy weather was experienced crossing the Atlantic, and many of the goats were killed or maimed. The surviving animals were sent to Texas, but, for some incomprehensible reason, the editors of several papers in that State waged war against the introduction of these goats into the State, the consequence being that the farmers refused to take any interest in the breeding of Angora goats, and for many years no more were imported. The opposition displayed could only be attributed to spite against the importer.

In 1868 about 400 goats were exported to the Cape by sailing vessel. The voyage was a protracted one, and about 20 per cent. of the goats died on the voyage; the remainder were sold at very high prices; and it may be said that this was the starting point of the Cape farmers in this industry.

In 1869 60 goats were sent by sailing vessel to Australia, all arriving in good condition after a voyage of 160 days. A further shipment of 30 goats was made in the following year to the same colony, and they also arrived in good condition.

In 1870 about 2,000 goats were sent to the Cape, by steamships via Gibraltar and Plymouth, in shipments of from 200 to 800. In the latter case, and in the first instance mentioned, vessels were specially fitted out for the conveyance of the goats. The average length of the voyage to the Cape by steamer was forty days, the losses on the way were slight, and good prices were realized for the goats.

About the year 1876 a company in California sent an agent to Constantinople, who proceeded to Asia Minor and bought about 200 goats, which were shipped to Liverpool, and from there to California.

In 1878 a farmer from the Cape came to Turkey and selected 30 rams, with which he returned to the Cape.

In 1880 a shipment of about 400 goats was made to the Cape, where they were sold, and realized very high prices, as much as £250 sterling being paid for a single ram and £105 for a ewe.

Smaller shipments have been made from time to time to the colonies and the United States.

BEST MODE OF PURCHASING.

Hitherto the course pursued by those who have imported Angora goats into Cape Colony or Australia has been to order the animals from some firm connected with the mohair trade, who would then send a competent person to the districts where the goats are to be found, and this person, professing a thorough knowledge of the country, and being acquainted with the best flock-masters, would select such animals as he considered proper for breeding purposes. Before purchasing any goat a thorough inspection should be made to see that the animal is perfect in every respect, and again, previous to shipment from Constantinople, or any other port, an inspection of all the animals should be made by a medical man, and if there are any goats which may have contracted disease or become weak in the journey from the interior of Asia Minor, these should be left behind until they recover.

PURE BREED ANIMALS.

The following is a description of a pure breed Angora goat: A neat and tapering head, with fineness of horn, which, in the case of a female, should be small, and inclining in the male horizontally towards the back, slightly branching outwards. The hair should hang in a solid mass, and should be abundant both at the chest and hind-quarters, covering the legs, which are short, down to the hocks. The wool should surround the face, with a thick tuft in front of the horns falling over the forehead. The ears should be small and the face white, and each animal should have a long, flowing beard.

PROBABLE COST OF GOATS.

None of the animals intended for exportation should be younger than two years of age nor older than four.

As the goats required for breeding purposes must be of the purest breed and perfect in every respect, and as such goats are generally found in the possession of well-to-do farmers who will not easily part with the animals, it is somewhat difficult to state what the exact cost would be, but judging from the prices paid hitherto, I should say that £8 sterling would be the average cost in Asia Minor. For some more would have to be paid, for others less. Fancy prices are often asked for best stud rams, and the Cape farmer who visited the country in 1878 paid as much as £18 for one or more fine specimens. It is no economy to buy cheap goats, as such animals would not be thoroughbred and would never give satisfaction. This has been clearly proved over and over again by those who bought cheap animals and exported them to the Cape.

The following extract from the letter of a celebrated breeder of Angora goats, substantiates my statement. He says, writing from the Cape:

> Good, really good goats are quite as scarce in Turkey as they are here, and the Turks are, if anything, more loath to part with them than we are. It took me with two agents a whole day's hard work to buy one goat, and in spite of that I had to pay a long price for him.

Another farmer, who bought a ram imported from Turkey, writes:

> I am happy to inform you that he is well. At ten months' growth he clipped me 13 pounds and it was 14½ inches long.

My advise to all intending importers is that they should not limit the price to a pound or two, but pay such a figure as will secure the very choicest goats.

COST OF TRANSPORT TO CONSTANTINOPLE.

The cost of bringing the goats from the interior of Asia Minor to the capital is small. If the weather is fine they can be driven down in a month, and the only charge would be the wages of the shepherds. The only other means of transport is by mules, each mule carrying two goats. This method of transport is of course more expensive, but in the winter it is necessary. The cost of transport in any case would not exceed 15*s*. per head.

HOW TO IMPORT THE GOATS INTO THE UNITED STATES.

If the number to be imported is large and sufficient to allow of the expense, I would certainly advocate the fitting up of a steamship, either at some port of the United States or at Constantinople, for the express purpose of carrying goats. Should, however, the number of animals be small they would have to be shipped by steamer to Liverpool and thence to New York or Boston, unless there should be a vessel in the port of Constantinople at the time sailing direct for the United States, as was the case upon several occasions, when large quantities of arms were exported from the States, and the steamships, after discharging their cargoes, returned thereto. The goats might also be sent by sailing vessels, but, should the voyage be a protracted one, and the weather very boisterous, the risk would be great and the goats might suffer considerably.

FITTING UP THE EXPORT VESSELS.

The vessel should be well provided with pens, built expressly for the animals. These pens should be placed upon the upper deck and 'tween-decks, the lower hold being reserved for the fodder necessary for the animals during the voyage. Each pen should be made to contain 3 goats, say 6 feet long and 4 feet in width, and provided with a feeding-box the whole width of the pen, but so arranged that while the goat can feed with ease out of the box, it cannot get its feet into the trough, for if the food is trodden upon the goat will not eat it. The pens on the upper deck should be provided with slanting roofs, and all the pens should be raised from the decks at least 4 inches, to allow of the free passage of water underneath in case of seas being shipped, or of the decks being washed. The flooring of the pens should be perforated with small holes to allow the water or urine to pass off at once; and lastly, the vessel should be well supplied with water-tanks, and means of ventilating the 'tween-decks.

COST OF IMPORTING GOATS INTO THE UNITED STATES.

To the first cost of the animals would have to be added freight from Constantinople to Liverpool, 30*s*., movable pens, 10*s*., fodder, shepherds, inspection fees, &c., 15*s*., and freight from Liverpool to the United States, say, £3 per goat, or a total of £5 15*s*., per head, which, if added to the first cost, would bring the total to £13 10*s*. But to be on the safe side and allow for losses during the voyage and unforeseen expenses, it would be well to put the average cost at £15. per goat delivered in the United States. This cost is based upon the supposition that the number of goats to be imported is small, and would have to be shipped via Liverpool. Should the number be large and sufficient to allow of a vessel being chartered for the purpose, the expense of freight would be lessened, as the steamer might take a certain quantity of cargo in her lower hold, the space not being wholly required for fodder. The regular mail-boats are not allowed to carry live goats from Liverpool, so that small numbers would have to be shipped by one of the irregular steamers. The writer has had experience in the shipment of small numbers of goats to the United States, and knows that they cannot be delivered at a less cost than £15 per head.

CARE OF GOATS DURING THE VOYAGE.

The goats, having been got safely on board the vessel, should be placed in the pens, not more than three to a pen, rams and ewes separately; and this having been accomplished, the daily routine will begin. Those in care of the animals must feed them three times a day, early in the morning, at noon, and in the evening. The quantity of hay consumed by each goat per day is about 3 pounds, but they should not be stinted, and the shepherds should see that the feeding-boxes are well supplied. Water must be given to each goat once a day; five goats will drink about a gallon of water. Twice a week a handful of oats or barley must be given to each goat, care to be taken that no water is supplied immediately after the oats. The pens must be cleaned out every day, and a little hay put at the bottom of each pen for the animals to lie upon. If any goat becomes sick or weak during the voyage, it should be placed in a separate pen and be carefully tended. In fine weather the goats should be taken out of the pens and allowed to roam the decks for an hour or two. A little salt should be placed in the feeding-boxes, as the goats are very fond of it, and it tends to keep them in good health.

Assuming that the voyage from Constantinople to New York would occupy 40 days, the following would be the supplies necessary for every hundred goats: 20 tons of hay, 50 bushels of oats and barley, 1,000 gallons of water, 50 pounds of salt.

All these supplies can be obtained in Constantinople.

SEASON FOR SHIPPING.

The goats may be shipped from Constantinople between the months of September and February, when the hair is of fair length, and the breed of the animals can be distinguished. It would, however, be advisable to have them shipped as early in the season as possible, say in October or November, so as to avoid the severe gales which prevail in the Atlantic during the winter. The largest shipments to the Cape were made in the months of November and February.

PROHIBITION OF EXPORTS.

After the last shipment of goats to the Cape in 1880, the Turkish Government prohibited the export of Angora goats. This was done in response to a petition on the subject sent in by the native dealers in mohair, who became alarmed at the rapid development of the industry at the Cape, which they supposed was the cause of the depreciation in the value of mohair. The true cause of the depreciation has been mentioned under the heading of "Export and price of mohair."

This prohibition had nominally been in force for many years, and was in reality only renewed in 1880, but like all other governmental edicts in this country, it can be overcome, and need not stand in the way of intending importers. Some small outlay may have to be made to obtain a permit for exportation. Shortly after the prohibition the writer had a permit of exportation offered to him for 2,000 goats. The safest way, however, would be to apply for a permit through the minister of the United States, who would no doubt obtain it.

As to the probabilities or possibilities against as well as in favor of the importing of Angora goats into the United States, it is impossible to say more than is embodied in this report. Intending importers can judge from the remarks made whether the industry would be a success or not. The climate, food, and all the requisites for Angora goat-breeding are to be found in the United States. I can simply supplement my report by the following extract from a letter written by a farmer in the State of Illinois, who imported a few Angora goats. Writing on the 9th of December, 1880, he says:

> The goats are fat and appear to be in good health, and I know of no reason why they should not be bred here successfully and profitably.

G. H. HEAP,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Constantinople, April 10, 1883.

Particulars of a sale of Angora goats at the Cape of Good Hope.

RAMS.

	Price realized.
Wild Blood	£250
Wrestler	160
Forest Ruler	90
Commander-in-chief	85
Seal Bearer	85
Judge	75
Governor-General	75
Furry Coat	75
Citadel	70
Colonel	65
Warrior	60
Ruler	60
Lightning	55
Mountain King	50
Soldier	50
Drumdash	45
Tiger	45
Aristocrat	45
Ambassador	45
Revenue Officer	40
Knight	40
Wayward	210
Commodore	190
Silver Fleece	90
Libertine	85
Faithful	[illegible]
Vagabond	

EWES.

	Price realized.
Mottled Rose	£75
Diamond	45
Emerald	45
Pansy	45
Pearly	45
Hyacinth	45
Star	35
Handsome	35
Pleasure	35
Also four rams without names which realized	485
And four ewes	290

AMERICAN TRADE IN MADAGASCAR.

1.—TRADE AT TAMATAVE.

REPORT BY VICE-CONSUL WHITNEY.

I inclose to you herewith the required "return of trade" between the United States and this port, and the "return of navigation," for the six months ending December 31, 1882.

The "return of trade" shows that the imports amounted to $207,409.82, and the exports to $257,488.54. Besides the imports as shown by the return, American manufactures to the amount of about $40,700 were brought from the United States, via Hamburg, in German vessels for a German house. The total exports sent to the United States, as shown by the return, amounted to $257,488.54. Of this amount $140,763.53 went in American bottoms, and the balance ($116,725.17) went by English and French steamers, via Europe.

As always before, the imports from the United States consisted largely of domestics, the value of all other articles being only $39,840.20.

The "return of navigation" shows that the total number of arrivals and departures of all nationalities was 237 (116 arrivals and 121 departures.) Of the arrivals 8 were men-of-war (steam); merchantmen, 108; aggregate tonnage, 19,951—by nationality, as follows: 2 American (sail), 1,297 tons; 59 British (7 steam and 52 sail), 6,077 tons; 40 French (19 steam and 21 sail), 10,864 tons; 4 German (sail), 1,102 tons; 3 Norwegian (sail), 601 tons. Of these vessels 46 were coasters that trade on this coast, and one steamer (mail) that calls bimonthly.

American trade at this port continues to hold its own, and it is not excelled by any other except, perhaps, by British.

Herewith inclosed please find the report of trade on the southwest coast of Madagascar by Consular Agent Stanwood, of Andakabe.

R. M. WHITNEY, *Vice-Consul.*

UNITED STATES CONSULATE,
Tamatave, February 19, 1883.

Statement showing the imports and exports between Tamatave and the United States for the half year from 1st July to 31st December.

Articles.	Imports.		Exports.	
	Amount.	Value.	Amount.	Value.
Domestics .... bales..	2, 346	$167, 569 62		
Remington rifles and bayonets	2, 500	28, 500 00		
Metallic cartridges	250, 000	6, 250 00		
Kerosene oil .... cases..	2, 300	2, 880 20		
Shooks .... empty cases..	700	700 00		
Iron safes	2	1, 000 00		
Sundries: Flour, 31 bbls.; hide poison, 7 pkgs., and 1 case Belmontyle oil		510 00		
Rubber, India .... lbs..			257, 398	$156, 020 51
Dry salted hides			29, 995	98, 020 22
Coffee .... lbs..			22, 200	3, 239 50
Grass lambas			736	208 31
		207, 409 82		257, 488 54

AMERICAN TRADE IN MADAGASCAR—Continued.

2.—TRADE ON THE SOUTHWEST COAST.

REPORT BY CONSULAR AGENT STANWOOD.

In compiling this report I have had the same difficulties to encounter as explained in my last, viz, a positive refusal to give any information in some quarters, and in others giving answers so glaringly false that to quote them would be absurd. There are only two places where duties are collected by the Hovas, and at these no records are kept, and smuggling and bribery would render them valueless if they were.

I send herewith the invoices of the shipments made direct to the United States, but must add that there is a constant communication by boat with Maintyrano (Sakalava port, no duties), and I cannot tell how much may have been shipped coastwise, for obvious reasons. The volume of trade has been larger this year than for either of the five preceding years, but most of it has gone as usual into English and French hands.

Two cargoes of fine wood have been shipped from here, the particulars of which were previously sent. Other exports have been of the usual articles, as the extreme difficulty of getting samples forwarded, and, if they are sent, the almost impossibility of obtaining any information as to their fate, discourages those who are in a position to do so from endeavoring to bring forward any new articles.

It is much to be regretted that there is not a large American house on this coast, independent of Mussulman interests or any foreign influence whatever, which would take a little pains to find out what articles were worth handling, and push them.

The consular commercial reports are full of extracts, quotations, &c., to prove the superiority of American manufactures. It appears to me that the want is American merchants. I have seen many countries, but never one where the general superiority of American manufactures was not admitted; but it would seem that the American merchant, although bolstered up by this admitted superiority, is still unequal to the task of competing with the English merchant, especially in this country. The reasons are not far to seek, and I have no hope of any improvement until a new house with large resources comes here. There is ample room and the Hovas would be delighted to welcome a house of the style

Messrs. Holmes & Co., and there is no doubt but that if such an establishment were here they would, as before, simply "walk over the course."

IMPORTS.

There has been an increase in the imports of American brown sheetings, which are the only American cotton goods imported here, but a large proportion of the trade being Sakalava, the amount of Salempores prints, imitation Muscat cloths, handkerchiefs, &c., is large as compared with the brown sheetings, bright colors being in demand for this class of trade. All colored goods are English, French, or Bombay manufacture.

In cutlery there has been the usual trade in axes, hatchets, &c., and an invoice of knives of the manufacture of the Meriden Cutlery Company, which came here early in the year, were so much superior to the ordinary trade articles that they sold readily at extreme prices, and I am informed that several orders for more have gone forward.

Crockery holds its own, as the new country which is being opened is absorbing considerable. Hardware is also in demand for the country trade, and is readily bought at good prices. In a recent journey of several hundred miles in the Betsileo and Ebara countries I only saw one iron cooking-pot, and this in the house of a Hova preacher, who had brought it from Antananarivo, and in one town of considerable size a common iron tea-kettle was exhibited on the table in the house of the head man as an article of ornament.

A determined effort is being made to open a regular trade with these rich districts from this coast, and there is no doubt of its ultimate success, although these people are slow to move. Several of the governors of the interior towns are taking hold of the matter with a keen interest, which is a powerful factor in its favor. The principal difficulty has been carriers. The recent trouble with Zetalee frightened the country people nearly to the point of imbecility, and they would not undertake a journey at all unless there was a white man with them. Considering his whole force was only seventy men, it would seem easy to take care of him. He is now reported to have gone to Tullear, and joined Laymerisa. This, coupled with the advent of six hundred soldiers and a new commander, will, it is hoped, improve matters materially.

Kerosene oil.—A small quantity of this was landed, ex Sicilian, in April; and there are imports also from South Africa, and some brought coastwise from Nossi-be; but no one has thought it worth while to bring a serviceable lamp at a reasonable price, $4 to $4.50 each being the usual charge for a lamp. This kills the trade in oil." Early in this year the natives attempted to use it with "koranna" lamps, and the result was an explosion, one woman burned to death and the other two inmates of the house being badly burned and narrowly escaping with life; while the fire caused by it consumed about 60 houses, and at one time it looked as if a clean sweep of every building in the place would be the result. Of course this has given kerosene a set back with natives. But the real reason lies in the fact that no safe lamps within ordinary native means could be had. No matter if the lamps are out of fashion at home, if a reasonable degree of safety can be had and a moderate price the natives will buy both lamps and oil; while as it is the oil is not in demand for want of lamps to use it with.

Miscellaneous articles of every description will sell here *if seen.* Illustrated catalogues and "taking" advertisements so advantageous in other countries, are not the slightest use. They convey no impression to the native mind; and while any article that pleases them is bought (by barter) at an extravagant price, no amount of explanation will give them any idea from an illustration; it has no meaning to them; it is simply a "taratasy" (paper), and no more. Any house having direct communication with the United States could do well in these lines if reasonable at the outset. The tendency is, however, I regret to say, to strangle a new trade at its birth by stupendous prices, 200 per cent. profit being by no means unusual for these outside articles.

Coin.—Of late there have been calls from Hovas for American and English gold in exchange for dollars in small sums, and as I write a Hova from Maliambandy wishes to exchange $250 in silver for American gold. This is the largest amount in any one sum that I have heard of yet; but trifling as it is, it shows progress in the right direction, when it is considered that two years ago they would not have it on any terms.

All dollars now pass current here at equal values; Mexican dollars, and Greek, French, and Italian five-franc pieces being the currency.

VICTOR F. W. STANWOOD,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Andakabe, December 30, 1882.

CONSUMPTION OF AMERICAN MEATS IN GERMANY AND FRANCE.

REPORT BY CONSUL STEUART, OF ANTWERP.

In the March number of the American Mail and Export Journal I read with much interest an article entitled the "*Pork question again,*" but it contains the following erroneous comparison regarding Belgium, to which I wish to call attention and to correct, as it weakens the force of the argument by greatly underrating the importance of Germany and France in our foreign pork trade.

The author gives a table of exports of American pork products during the fiscal year ended 3d June, 1882, and adds:

> It will be seen by the foregoing that the consumption of American pork products, outside of lard, in Germany and France is insignificant, both countries not consuming one-half of that of Belgium alone.

The mistake he makes is in assuming that the total importation into Belgium is consumed in Belgium, whereas it is merely in transit, and from 75 to 80 per cent. of the bacon and lard coming from the United States into Antwerp is sold to and consumed in Germany; and the same comparison might have been made, in regard to American hams, with France, as before her prohibition decree Antwerp had a large trade with Northern France in that article. But the consumption of American pork in Belgium is very trifling as compared with Germany and France.

Antwerp acts as the broker for a great part of Europe, and the large importations find their way here simply because this is the best market and the best distributing point on the continent.

Since 1880 the imports of American meat have fallen off greatly on account of the continued high prices ruling in America, but the amount imported into Antwerp during 1882, as shown by the table herewith inclosed, had a value of more than $5,000,000; and it is this large interest that makes the dealers here watch with anxiety the action taken b the European Governments affecting this interest, and also to see what, if anything, is to be done by our Government.

I have called attention a number of times, and do again here, to the fact that American meat has its value on this market as an article of barter and not as an article of consumption. Therefore, Belgium being a kind of transit depot, the heavy importation here tends to increase and not diminish the importance of Germany and France, for they are the recipients and consumers; they are very important to our foreign pork trade, and their absence will be felt when we again have a large surplus crop at home.

I hope to see these arbitrary prohibition decrees kept in view, for it is a question affecting not meat alone, but may be extended with equal justice or injustice to any other of our products that may stand in their way.

The sanitary plea is, of course, an invention without reason and without truth. If the Germans will insist upon eating raw pork, they are entitled to no sympathy for any consequence arising therefrom; and as for France, in a question of endangering the public health, so long as we continue to import and drink her *so-called* wines and brandies, she would have greatly the advantage of us if all her ports were thrown open to our pork even if it should be really much worse than they claim it to be.

JOHN H. STEUART,
Consul.

UNITED STATES CONSULATE,
Antwerp, April 12, 1883.

Import of bacon and lard into Antwerp, 1882.

Months.	Bacon.	Hams.	Lard.	Lard.	Lard.
	Boxes.	*Boxes.*	*Tierces.*	*Cwt.*	*Pails.*
January	13, 854	456	16, 653	9, 800	1, 260
February	4, 064	315	1, 455	2, 335	1, 100
March	2, 045	356	4, 588	2, 220	....
April	1, 062	200	4, 125	3, 444	....
May	1, 889	363	3, 920	560	....
June	3, 289	122	6, 235	1, 800	50
July	1, 558	260	5, 645	5, 400	....
August	1, 342	170	1, 050	2, 800	....
September	1, 089	....	225	7, 200	....
October	622	....	1, 700	11, 200	....
November	1, 260	....	16, 552	4, 300	....
December	992	....	6, 825	6, 140	....
Value	$1, 796, 374	$86, 230	$2, 896, 866	$384, 993	$32, 442

Total value, $5,196,905.

IMPORTS OF AMERICAN GOODS INTO JAVA.

REPORT BY CONSUL HATFIELD, OF BATAVIA.

In the hope that it may prove of some slight service in giving merchants at home an idea of the status in this island, I beg to refer to the following concerning the import trade here:

The only article of American manufacture which can be said to be "imported" into Java is petroleum, and of this there is no dearth; on the contrary too much oil has been brought here. In Soerabaya alone a stock of some half a million of cases is stored, and the natural result is, and has been for some time past, a low range of values, which shows no immediate prospect of much improvement, though powerful and wealthy syndicates are doing all they can to maintain prices. They lately raised their price to $2.14 per case of 10 gallons, retail.

I trust soon to be able to send the Department my statistics and a report regarding this business, and defer further solution of it until then.

I have heard much more, I am glad to say, during the past year of American manufactures than hitherto, and have also seen more of such goods exposed for sale.

There is no doubt whatever in my own mind that, with a regulated means of supplying their wants, many import houses in this city and throughout Java would draw a portion of their supplies from the United States. I have been told so in more than one case, and see no reason to doubt the statement.

With the difficulties and heavy expense and chances of damage, &c., incurred by transshipment of cargo via England or Holland, such as now take place, people, even if they know what they want, naturally hesitate.

Another fact of moment, which may perhaps seem remarkable, is that many, yes, very many, foreign merchants have but a faint idea, if any, of what American manufactures are like.

I make this statement with the knowledge that it may be sharply queried, but after the exhibitions of surprise and admiration I have seen betrayed at such samples of our workmanship as have been brought to Java, I can no longer doubt that this is the case.

To any one familiar with the neatness, appearance, lightness, and strength of the product of American factories and workshops, compared with the work sent out from many European (especially German) mills, the truth of what I have stated cannot but be patent.

It may be assumed as moderately certain that, notwithstanding all the difficulties caused by a want of properly organized and subsidized steam service between New York and the far East, a good business could be built up if purchasers could be shown samples. It is certainly a pity that firms in the United States, who seem so ready to consign goods to Central and South America and other places, pay so little attention to Java.

I can only recommend this. It is useless in the far East to expect a foreign merchant to order goods from the United States when he has such a faint idea of what he may receive, sometimes no idea at all. I have heard importers here remark that if they only had a sample, or people at home would only make a small consignment, they would willingly send orders *and money* if a market could be found.

It seems strange certainly that the enterprising business men of the United States should hesitate so long at this. In Great Britain and on the Continent firms regularly do this business; and it is a known fact, in Java at least, that a portion of the import trade is carried on by houses who by no means order all they sell; they have a number of consignments on accounts which supply many goods.

Petroleum vessels are constantly coming to Java, and though they do not all come to Batavia, it would, I should imagine, be worth while trying this way of shipment, and transship via local steamers to this port from Samarang or Soerabaya. If this or something very like it is not done, it will, I fear, be a long time before the United States do much export trade with Java.

OSCAR HATFIELD,
Consul.

UNITED STATES CONSULATE,
Batavia, Nov. 29, 1882.

APPENDIX TO CONSUL HATFIELD'S REPORT.

For the proper appreciation of the value of the foreign commerce of Java, the following extract from the letter of the Secretary of State (Commerce of the world and the share of the United States therein) is given as an appendix to Consul Hatfield's report:

FOREIGN COMMERCE OF DUTCH INDIA.

The foreign trade of the Dutch East Indies can only be reached, in the absence of all other returns, either consular, colonial, or by research, through the returns of the principal countries having commercial intercourse therewith. This research gives the following results:

Statement showing the estimated foreign commerce of Dutch India for the year 1880–'81.

Principal countries.	Imports.	Exports.
Holland	$18,890,000	$20,630,000
Straits Settlements	15,923,000	10,000,000
Great Britain	9,328,000	9,972,000
United States	1,840,000	6,650,000
France	818,000	6,150,000
Australasia	870,000	2,750,000
Siam	3,250,000	100,000
Saigon	1,520,000	50,000
China	1,800,000	400,000
Philippine Islands	400,000	1,200,000
Total principal countries	54,639,000	57,902,000
All other countries (estimated)	846,000	3,000,000
Total	55,485,000	60,902,000

The foregoing statement, as compiled from outside official publications, may be relied upon as being a very close estimate of the foreign trade of Dutch India for the year 1880.

Sugar, coffee, and tobacco constitute more than three-fourths of the exports of Dutch India.

The principal portion of the sugar is exported to Holland, Great Britain, France, and the United States.

The chief portion of the tobacco is exported to Holland; the same may be said of the coffee. Next to Holland the United States receives the largest quantity of coffee therefrom.

The imports of the Dutch East Indies consist of a large assortment of manufactures and produce, of which the following are the principal articles: Cotton manufactures, rice, woolen goods, silk goods, earthenware, drugs and medicines, provisions (principally butter, hams, cheese, fish, salted and preserved meats, &c.), machinery and implements, yarn, distilled spirits, glassware, jewelry; iron and steel and manufactures of; coal; copper and bronze and manufactures of; leather and manufactures of; meal, mineral waters, modes and fashions, petroleum, opium, cigars, lard, tea, tinware, wines, &c.

The imports of cotton manufactures into Dutch India amount to at least $15,000,000, and are received principally from the following countries:

From Great Britain	$6,700,000
From Holland	6,070,000
From Straits Settlements	1,880,000
From France	95,000
[illegible]om United States	8,000
Total from countries enumerated	14,753,000

Adding the exports from the Straits Settlements, and such of the exports from Holland as are British goods, to the exports from Great Britain, and it will be seen that English cottons control the markets of Dutch India.

The details of the trade of the principal countries with Dutch India are given in the following statements, to which should be added the increased value in the exports on their arrival in Dutch India:

Exports from Holland.—Cotton manufactures, $5,600,000; iron and manufactures of, $1,690,000; wearing apparel, mercery, hemp manufactures, silk goods, woolen goods, paper, steel and manufactures of, steam machinery and agricultural implements, distilled spirits, woolen and cotton yarns, glassware, meal, instruments, copper manufactures, oils, tobacco manufactures, tinware, &c. Total $17,490,000.

Exports from the Straits Settlements to Dutch India.—The principal exports from the Straits Settlements to Dutch India consist of wearing apparel (principally English), beeswax, bread and biscuit, cabinet ware (English), cotton manufactures (English), earthenware (English), fish, dried and salted, gambier, glassware (English), flour, rice, gunnies, jewelry, boots and shoes (English), machinery (English), matches (English), medicines (English), copper ware, hardware and cutlery (English), iron and ironware (English), kerosene (American), opium, paints (English), paper (English), provisions, silk and silk goods, spirits, tea, tobacco and cigars, umbrellas, woolen goods, &c. Total exports, $14,723,000.

Imports into France from Dutch India, 1880.

Articles.	General imports.	Special imports.
Sugar, raw	$5, 556, 000	$2, 830, 000
Coffee	463, 000	260, 000
Indigo	248, 000	....
Pewter, crude	141, 000	....
Copal, &c	140, 000	....
Straw hats	121, 000	....
Pepper	65, 000	44, 000
Other articles	65, 000	8, 000
Total	6, 799, 000	3, 142, 000

Exports from France to Dutch India, 1880.

Articles.	General exports.	Special exports.
Wines	$244, 000	$244, 000
Cotton manufactures	88, 000	13, 000
Silk manufactures	62, 000	3, 000
Wool manufactures	57, 000	56, 000
Brandies, spirits, and liqueurs	44, 000	43, 000
Pottery, glass, and crystal	18, 000	17, 000
Manufactures in skin and leather	16, 000	15, 000
Jewelry in gold and platinum	15, 000	2, 000
Dressed hides	12, 000	11, 000
Table fruits	11, 000	11, 000
Mercery	10, 000	10, 000
Gold and platinum wire	10, 000	10, 000
Other articles	168, 000	106, 000
Total	755, 000	541, 000

Imports into Great Britain from Dutch India.

Articles.	1879.	1880.
Coffee	....	$1, 000
Gum, all sorts	....	20, 000
Spices, pepper	$4, 000	....
Sugar, unrefined	8, 578, 000	10, 812, 000
All other articles	88, 000	39, 000
Total	8, 670, 000	10, 872, 000

2 JUL 83

Exports from Great Britain to Dutch India.

Articles.	1879.	1880.
BRITISH GOODS.		
Arms and ammunition, gunpowder	$10,000	$20,000
Coals, cinders, and fuel	228,000	400,000
Cotton yarns	361,000	355,000
Cottons:		
By the yard	5,355,000	5,426,000
By value	130,000	138,000
Earthen and china ware	64,000	78,000
Hardware and cutlery	46,000	56,000
Linens, by yard	30,000	54,000
Machinery:		
Steam-engines	258,000	501,000
All other	243,000	119,000
Metals:		
Iron, wrought and not	172,000	336,000
Copper, wrought and not	138,000	83,000
Soap	229,000	153,000
Woolens:		
By yard	110,000	66,000
At value	12,000	11,000
All other articles	610,000	712,000
Total British goods	7,996,000	8,508,000
FOREIGN GOODS.		
Metals, iron bars	39,000	3,000
Wax	4,000	3,000
Wine	9,000	9,000
All other articles	17,000	85,000
Total foreign goods	69,000	100,000
Grand total British and foreign products	8,065,000	8,608,000

TRADE OF THE UNITED STATES WITH DUTCH INDIA.

Imports from Dutch India.—Free of duty: Coffee, $4,702,000; gums, $76,000; hides, $100,000; woods, $50,000; tin, $40,000; essential oils, $35; indigo, and all other articles, $93,000; total free of duty, $5,076,000. *Dutiable imports:* Hemp, $203,000; spices, $224,000; sugar, $1,718,000; all other dutiable articles, $10,000; total dutiable, $2,154,000. Total imports, free and dutiable, $7,250,000.

Exports to Dutch India.—Out of a total direct export to Dutch India of $1,730,000, kerosene amounts to $1,670,000, leaving only $60,000 for all other articles, consisting of small lots of cottons, wooden ware, perfumery, &c. It thus appears that our direct exports to Dutch India consist almost entirely of the single article of kerosene.

Not only is our trade proper with Dutch India against us, but the carriage thereof is equally against. Of the total imports, foreign vessels brought $6,371,000, and American vessels $879,000; of the exports, foreign vessels carried $672,000, and American vessels $1,057,000. It happens here, as in our trade with all other parts of Asia, as well as with South America: Foreign ships carry European manufactures out, and on their return take cargoes for the United States, loading here with provisions and breadstuffs for Europe; there they load up again with manufactures for Asia, Africa, or South America. Always bringing us the raw materials, but never taking away any of our manufactures![*]

---

[*] In consular reports for February, 1881, there is a very interesting report from Consul Eckstein, of Amsterdam, on the trade of the Dutch East Indies.

INDIAN VS. AMERICAN WHEAT.

REPORT BY CONSUL-GENERAL MATTSON, OF CALCUTTA.

The financial statement of India for 1883–'84, by the honorable E Barring, minister of finance, contains an interesting chapter, VII, on the wheat trade, with special reference to Indian competition with American wheat in the markets of Europe, which I have the honor to inclose.

H. MATTSON,
Consul-General.

UNITED STATES CONSULATE GENERAL,
Calcutta, March 19, 1883.

THE WHEAT TRADE OF INDIA.

STATEMENT BY THE HONORABLE E. BARRING, MINISTER OF FINANCE.

[Inclosure in Consul Mattson's report.]

157. This trade may, for all practical purposes, be said to date from the year 1873, when the export duty was removed. In 1881–'82 nearly a million tons (19,863,520 cwt.) were exported. The export during the current year (1882–'83) will probably be about 14,000,000 cwt.—a figure which, although below the exceptionally large export of 1881–'82, is still 100 per cent. in excess of that of 1880–'81. The great strides made in this trade during the last few years are to a great extent due to railway extensions in India and, so far as the great exports of 1881–'82 are concerned, to deficient crops in the United States.

158. For all practical purposes it may be said that the whole of the Indian wheat trade is with Europe. In 1881–'82 only 310,000 cwt. out of 19,863,000 cwt. were shipped to other than European markets. The largest market for Indian wheat—as for most of the other staple products of India—is England. Out of the total quantity exported in 1881–'82 England took nearly one-half, and has taken about the same proportion during the current year. France took 5,308,000 cwt. last year (1881–'82), and has this year (1882–'83) taken over 3,000,000 cwt. out of the 11,828,000 cwt. already exported. Indian wheat also goes to Belgium, Holland, Italy, and Egypt. But shipments to Egypt are only nominally for that country. Ships go to Port Said "for orders," and the exports recorded in our trade returns as going to Egypt are mostly intended for some continental market.

159. The total production of wheat in the United Kingdom is estimated by Sir James Caird at 12,000,000 quarters, or rather over 53,000,000 cwt. (2,650,000 tons). The yield is said by Sir James Caird to be decreasing. He estimates that from 1873 to 1877 the average yield was 2¼ quarters to the acre, and in 1879 not more than 2 quarters. In former years the yield has reached 3¼ quarters and more to the acre. He thinks that there is a decrease in fertility. The area under wheat is also diminishing, and land is being used for more profitable crops, for dairy farming, for grazing, and for market-gardening. Looking to the increased population and to the general tendency to devote land to other uses than the growth of wheat, it may be anticipated that the demand for wheat in England from other countries will increase in the future.

160. During the calendar year 1882 the English market was supplied with wheat from abroad to the extent shown in the following table:

	Cwt.
Russia	9, 571, 021
Germany	3, 083, 921
Turkey and Roumania	721, 030
Chili	1, 656, 361
Australia	2, 475, 127
British North America	2, 684, 828
United States	35, 059 623

	Cwt.
Egypt*	174, 862
India	8, 477, 479
Other countries	267, 370
Total	64, 171, 622

161. In addition to this amount of wheat wheat-flour to the extent of 13,028,705 cwt. was supplied to the English market from foreign countries during the year 1882, of which the United States furnished 7,777,262 cwt.

162. The total imports of wheat and wheat-flour were, therefore, 77,200,327 cwt., of which the United States supplied nearly 43,000,000, cwt., or about 56 per cent. of the whole. It is clear, therefore, that the United States is the most formidable rival with which India has to compete in the supply of wheat to the English market. Wheat-flour has not as yet been exported from India.

163. In this competition the United States possesses many natural advantages over India, which are, however, to some extent counterbalanced by one important disadvantage.

164. Looking first to the advantages, it is certain that the United States can supply a much larger total quantity of wheat for export than can be supplied by India. Sir James Caird, addressing the Statistical Society on November 15, 1881, said:

"In a single year the United States increased their acreage by an extent equal to our (the English) total growth. In the twenty years from 1840 to 1860 their wheat production rose from 10,000,000 to 20,000,000 quarters. In the twenty years from 1860 to 1880 it grew from 20,000,000 to 60,000,000 quarters, and their extent of good wheat land is practically unlimited. The two great corn products of that country are wheat and Indian corn, in regard to the first of which this country, and Western Europe generally, will become increasingly dependent on America, and the price of wheat here will be chiefly ruled by the production there."

165. In the statistical abstract of the United States for 1881 it is stated that in 1880 the area under wheat was 37,986,717 acres, the total production amounting to 271,531,624 cwt., or over 62,000,000 quarters (over 13,500,000 tons).

166. It is difficult to state accurately either the acreage under wheat in India or the total outturn of the crop. Our agricultural statistics are still very defective for most provinces, and there are none at all for Bengal. According to the figures given in the administration reports of the different provinces, there were, in 1880–'81, 19,474,594 acres under wheat. These figures are, however, inclusive of 1,000,000 acres in Bengal, which is simply a guess, and is probably very wide of the mark, We shall probably not be far wrong if we take 21,000,000 as the total present acreage. The great wheat fields are in the Punjab, where also the quality is the best, the northwest provinces, Oudh, and the central provinces. Bombay, Berar, and Bengal also grow wheat extensively, though in smaller quantity.

167. The outturn per acre varies enormously according to the province and soil, and according to whether the field is irrigated or not. It is difficult to attain accuracy on this point, but it would seem that for all India the average yield cannot be taken, on a liberal estimate, at more than 700 pounds to the acre, which is less than half the produce of English (from 1,500 to 1,600 pounds) and considerably less than that of the Amercan wheat-fields (850 pounds).† At this rate of yield the total outturn would be about 6,500,000 tons, of which it may roughly be said that about 1,000,000 tons are available for export.

168. The question of the extent to which the amount of wheat available for export could be increased without trenching on the food supply of the people or materially enhancing prices is one of great difficulty. Some remarks bearing on the subject will be found in the Report of the Famine Commissioners, Part I, paragraph 158. Some high authorities are of opinion that, under favorable conditions as regards the prospect of a market, it would be possible within a few years to double the amount of wheat available for export; that is to say, to increase it to about 40,000,000 cwt. There can be no doubt that very large quantities of land are awaiting cultivation, especially in the Punjab; Burmah, Assam, and the central provinces, but, of course,

---

* The low imports from Egypt were due to the war. The average imports from that country to England are considerably higher than the figures given above.

† In some places in America 25 bushels to the acre and more have been taken off an acre, but this quantity is greatly in excess of the average yield. The average outturn in 1880 for all the United States was 799 pounds to the acre, but this was a small yield. In 1877, it was 848 pounds. A yield of 850 pounds to the acre is probably a fair general average.

As regards the figure given above for India (700 pounds) it is to be borne in mind that it purports to give the average yield per acre. In some districts the yield is certainly in excess of this figure, and on all irrigated land, the yield is largely in excess of 700 pounds.

a good deal of this land is not suitable for the cultivation of wheat. In the eastern districts of the central provinces the new lines of railway will now open out a very large tract of wheat-producing country, which up to the present time has been unable to find a market for its surplus produce, owing to defective means of communication.

169. Any opinion on this subject can be little more than conjecture. All that can be said with certainty is that, on the one hand, the Indian outturn is capable of very considerable increase, and that the growth of the population in India is proceeding at a relatively slower rate than that of the United States, with the result that the proportionate amount of any increased production required for home consumption is less in the former than in the latter country. On the other hand, the processes of American are superior to those of Indian agriculture. The land in the Northwestern and Western States is unexhausted, and is of very great natural fertility. The acreage available for further cultivation is described on high authority as being "practically unlimited." The yield per acre in the United States is larger than in India. Under these circumstances it may be regarded as certain that, although the Indian supply of wheat available for export may be very considerably increased, the American supply may be increased to a still greater extent.

170. A further advantage possessed by the United States over India is in the matter of ocean freight. This advantage is not so great as might be the case under different condition as regards the fiscal laws of the United States. The heavy duties levied by the United States Government on imported foreign goods naturally check the imports into America from Europe with the result that, in the comparative absence of a demand for freight from Europe to America, shipowners are obliged to recoup themselves by charging relatively high freights from America to Europe. The disadvantage under which America labors by reason of this condition of things is artificial and not natural. It is imposed by the fiscal law, and would be removed were that law changed. In spite, however, of the present condition of the United States customs tariff, proximity to the English market, together with the fact that Indian shipping has to pay canal dues, is sufficient to turn the scale in favor of the United States. The distance from New York to Liverpool is 3,073 miles. The distance from Calcutta to London by sea is 8,083 miles: from Bombay to London 6,274 miles; from Kurrachee to London 6.080 miles. Dues are levied on passing through the Suez Canal at the rate of 10.50 francs per registered ton.

171. The charge for steamer freight from New York to Liverpool is variable. The rates in 1881 and 1882 were, on an average, for the year—

	1881.	1882.
To Liverpool	15*s*. 2*d*.	12*s*. 2*d*.
To London	16*s*. 11*d*.	16*s*. 0*d*.

172. In January of the present year, the rates were to Liverpool 21*s*. 6*d*., and to London 22*s*. 9*d*. per ton. Freights seem generally to rule high in January. Comparing the rates from New York to Liverpool for 1882, with Indian rates, we find that during the year 1882 the average charge from Kurrachee to London was £1 18*s*. 9*d*. a ton; from Bombay to London £1 15*s*. 2¼*d*.; from Calcutta to London £2 2*s*. 11*d*.* Taking the average American rates of 1882 as the basis of comparison, New York may be said to possess an advantage over Kurrachee to the extent of about 26*s*. 7*d*. or 22*s*. 9*d*. a ton, over Bombay of 23*s*. 0¼*d*. or 19*s*. 2¼*d*., and over Calcutta of 30*s*. 9*d*. or 26*s*. 11*d*. accordingly as the Indian rates are compared with the New York rates to Liverpool or to London. On the other hand, Indian rates compare favorably with freight from San Francisco to the United Kingdom, which in 1881 averaged £3 3*s*. 11½*d*. a ton. Last year of the whole import of wheat into the United Kingdom from the United States, 42 per cent. was shipped from the Pacific seaboard; in 1881, it was 31 per cent.; in 1880 only 18 per cent.

173. The United States possess a further advantage in facility of inland communication. The American railway system has been very rapidly extended during the last few years. No less than 105,000 miles of railway are now open. This rapid progress is due to the vigorous commercial enterprise of the people of America and to the large amount of capital seeking investment in American undertakings. It is in this respect more than in any other that India presents a remarkable contrast. Local capital is either not available or seeks, generally speaking, for more profitable investments than Indian railways afford. English capital has only recently begun to turn its attention to Indian railways, and can as yet scarcely be persuaded to dispense with government assistance. The development of the country has, up to the present time, mainly devolved on government, and, as a necessary result of this state of things, progress has been relatively slow.

174. In the matter of railway rates also American is at a great advantage as com-

---

*The rates stated here for Bombay and kurrachee are for the ton of 20 cwt., the rates quoted in commercial circulars being for the ton of 16 and 18 cwt. respectively.

pared to Indian wheat. So far back as 1876 the rate from Chicago to New York, a distance of 960 miles, was on an average 17 cents a bushel, or £1 5*s.* 6*d.* per ton for the whole distance. In 1878 and 1879 the published tariff rate was 20 cents per 100 pounds (18*s.* 4*d.* per ton) for the whole distance, but under stress of competition, wheat was carried from time to time in 1879 to New York, at 18, 15, and even as low as 10 cents per 100 pounds, or 9*s.* 2*d.* per ton for the whole distance. Sir James Caird, in his evidence before the royal agriculture commission in December, 1881, said that the rate had been reduced as low as ¼*d.* per ton per mile. This rate is equal to £1 per ton for the whole distance. The writer of an interesting pamphlet, recently published in India,* gives 14.5 cents a bushel as the latest rate he has seen quoted. This is equal to £1 1*s.* 9*d.* per ton for the whole distance. In the official report on the foreign commerce of the United States for the fiscal year ending June 30, 1882, by the chief of the Bureau of Statistics, the following figures are given as the average through rates in 1881 from Chicago to New York:

	Cents per bushel.	In sterling per ton.	
		s.	*d.*
By lake and canal	8.6	12	11
By lake and rail	10.4	15	7
By rail entirely:			
(1) During the season of navigation only	11.7	17	6
(2) During the year	14.4	21	7

175. The competition of water carriage has evidently a marked effect on rail rates in America. In India, although about 20 per cent. of the wheat brought to Calcutta is still brought down the river in boats, this traffic does not in the least regulate the railway rates.

176. I have been informed on good authority that wheat is now carried from Saint Louis, down the Mississippi, all the way through to Liverpool, for 14 cents a bushel, which is equal to 4*s.* 7¼*d.* per quarter or £1 1*s.* 1¼*d.* per ton. Mr. Leyland, owner of the Leyland line of steamers trading between Boston and Liverpool, told the royal commission on agriculture that the custom is to take the wheat at Chicago (about 1,500 miles from Boston) and deliver it at Liverpool at a through rate, including everything. This rate in 1881 averaged 10*d.* a bushel of 60 pounds, or £1 11*s.* 1¼*d.* per ton, of which two-fifths went to the ship and three-fifths to the railway, the division being made by arrangement.

177. Turning to India, we find that the rate charged in March, 1883, by the East India Railway from Delhi to Howrah, a distance of 954 miles, is rupees 71 per 100 maunds, which at an exchange of 1*s.* 7½*d.*, is equal to £1 11*s.* 5*d.* per ton.

178. From Lahore to Kurrachee, a distance of 821 miles, the rate is 12 annas 3 pie per maund, equal to £1 13*s.* 11¾*d.* per ton for the whole distance.

179. From Delhi to Bombay, over the Rajputana Railway, a distance of 889 miles, the rate until very recently was 13 annas 6 pie per maund, equal to £1 17*s.* 5¼*d.* per ton for the whole distance.

180. From Jubbulpore to Bombay, a distance of 616 miles, the rate is 10 annas 5 pie per maund, equal to £1 9*s*, 8½*d* per ton for the whole distance; that is to say, it costs considerably more to carry a ton of wheat 616 miles over the Great Indian Peninsula Railway than it does to carry the same quantity 960 miles over the American line.

181. A comparison of rates from other stations would produce similar results. But it is unnecessary to go further. It is abundantly clear that the Indian are much higher than the American rates.

182. In the detailed management of the trade also America has the advantage over India. There is far less handling of the wheat between the field and the hold of the ship in the former than in the latter country. The wheat is brought from the field into store-houses, and thence shot in bulk into the wagons, which are either brought alongside the ship or to warehouses which lie close to the ship. In India, on the other hand, wheat is brought from the field to a central station, say Cawnpore, is there bought by one trader (perhaps the agent of the shipping firm, perhaps another intermediary) from another trader, who has bought it from the cultivator. It is stored and bagged, then carted to the railway station, unloaded, stacked at the station, and again unstacked to be loaded into the wagons. On arrival at the port of shipment it is unloaded, stored, perhaps bought and sold once more, then carted to the shore, and put on board either from a jetty or from a boat.

---

* Indian Wheat *versus* American Protection, or the Influence on English Trade and American Protection of the Development of India.

183. Indian wheat is quoted in the London market at a lower price than American or Australian wheat. The average comparative prices during the year 1882 were as follows:

	Per quarter. s.	d.
American, best	48	9
Calcutta, Club No. 1	43	1
Australian, best	50	5

184. I am informed that the relatively low price of Indian wheat is not so much due to its quality, which is generally very good, but to its admixture with dirt and other inferior grains. At present shippers pay for the conveyance of about 5 per cent. of dirt to England.

185. The admixture of inferior grains with the wheat is, I believe, due to the fact that cultivators often grow other grains in the same field as wheat as a resource in the event of the failure of the wheat crop. This practice tends to keep down the price of Indian wheat.

189. I have dwelt at some length on this subject not only on account of its intrinsic importance, but because I shall be glad if I succeed in drawing the attention of those who have a more intimate practical acquaintance both with the trade and the conditions of Indian agriculture than any to which I can pretend, to the necessity of exertion with a view to strengthening by all possible means the position of Indian wheat in the English market. I have not discussed the question of the relative cost of production in India and in the United States, because, independently of the somewhat difficult economic issues involved in this question, it is very difficult to obtain facts of a sufficiently reliable nature to permit of any very accurate general conclusion being drawn from them. I may say, however, that there is reason to suppose that the prime cost of production in India is less than in the United States.

190. It remains for me to state the measures which have been adopted by the government with a view to facilitating the export of wheat to Europe. In the first place, the through rate for wheat conveyed from Delhi or Agra to Bombay has, in communication with the agent of the Bombay, Baroda, and Central India Railway, been reduced from 13 annas 6 pie to 11 annas a maund, and for other grains and seeds of the same class to 11½ annas a maund. The reduction in the case of wheat will, therefore, be 18.5 per cent. on the present rates. It will, no doubt, be followed by a corresponding reduction on the East Indian line. For the future it will be possible to lay down wheat coming from about Delhi or Agra to Calcutta or Bombay at a price of rupees, 4 4 3, or, at an exchange of 1*s.* 7½*d.*, £0 6*s.* 11¼*d.* per ton less than has heretofore been the case. To state the case in another way, the lowering of the rates is equivalent to a reduction in price of slightly over 1*s.* 6*d.* per quarter of wheat in the London market.

191. In the second place, the restriction as regards minimum loads has been abolished on the Rajputana and Bombay, Baroda, and Central India lines.

192. In a letter recently issued from the public works department, giving effect to this decision, the following passage occurs:

"In conclusion I am to draw general attention to the fact that every expansion of the export trade will bring to bear a heavier strain upon the facilities for handling, warehousing, removing, and shipping, produce at the railway stations and ports. These facilities are believed to be even now in many cases inadequate, and their improvements will, his excellency the governor-general in council trusts, engage the serious attention of the several local authorities at an early date."

I trust that this very important branch of the subject will receive the serious attention which it deserves.

193. Turning to the question of improved communications, it is to be observed that during the last two years the railway policy of the Government of India has been unsettled. I do not think that is any matter for surprise or for regret. In inaugurating a policy under which railways were, to some extent at all events, to be constructed through the agency of private enterprise, it was almost inevitable that there should be a period of transition during which it would be exceedingly difficult to adhere to any fixed policy. It was easy to declare beforehand the broad aim which the Government sought to attain, namely the construction of railways through the agency of unaided private enterprise, but experience alone could show how far that aim was attainable. We have now had two years' experience of the private enterprise policy. During that time a certain number of facts have been accumulated, which, we think are sufficient to enable us to lay down a definite policy, at all events for the immediate future, say for five years. We have, therefore, very recently addressed the secretary of state on the subject, but I am not as yet in a position to state what the final decision of the Government will be.

194. In the meanwhile I may as well state very briefly what have been the main

facts as regards railway construction during the last two years. At the commencement of the years 1881–'82 there were 9,619 miles of railway open to traffic, and 646 miles under construction, making a grand total of work either completed or in hand of 10,265 miles. At the commencement of the year 1882–'83 there were 9,961 miles of line open for traffic, and 1,302 under construction, making a grand total of 11,263 miles either completed or in hand. During the year 1882–'83, 290 miles were open to traffic, and the commencement of 1,194 miles of new line was authorized. The present position, therefore, is that we have 10,251 miles of line open to traffic, and 2,332 miles either under construction or sanctioned for commencement in 1883–'84. It is expected that 719 miles will be opened for public use during the years 1883–'84, leaving 1,613 miles for completion in 1884–'85 and subsequent years. Comparing, therefore, the commencement of the year 1881–'82 with the commencement of 1883–'84, it will be found that the amount of line either open or under construction has in two years been increased by 2,318 miles. An immense deal, of course, remains to be done, and I trust it may be possible in the future to push forward the construction of railways at a more rapid pace than in the past. At the same time it may be held that the progress during the last two years has, on the whole, been fairly satisfactory.

HOW AMERICAN WHEAT IS IMPORTED INTO FRANCE.

REPORT BY CONSUL WILSON, OF NANTES.

I have the honor to transmit a report describing "how American wheat is imported into France."

It is intended rather for popular reading of the farmers and millers of the interior than as a guide to the exporter.

While it is sufficiently exact for the purpose indicated, yet it might vary a few cents per bushel in its statements of expenses and prices, and a few cents might be a grave loss to the exporter.

Suppose the wheat to be at the seaboard, either Atlantic or Pacific, stored in one of the great elevator warehouses and ready for shipment abroad.

The owner may live in the United States, in England, or on the continent. London, Liverpool, and Paris are the great headquarters. Wherever he may live you may be sure he keeps the keenest watch over the grain market, extending his observations over the entire commercial world, knowing the present prices and judging of future prospects in every country. The minister of foreign affairs is not keener, more watchful, nor more interested in his observations of public affairs, either at home or abroad, than is the international grain merchant.

The agent or broker in the United States does the shipping; he, in England, or on the continent, receives the cargo and manages its sale, both acting under the instructions of the owner. They keep themselves in constant communication and work together. This can only be accomplished by the use of the telegraph. Mails are used only for general correspondence, regular reports, statement of accounts, &c. The expense of the telegraph is largely reduced by a system of signals with an understood code. The vessel may sail with either of two sets of orders one for a given port direct where her cargo is to be unloaded, the other for Cork or Falmouth "*for orders.*" The latter term means that on her arrival at either port she will receive orders as to her destination.

This course is preferred, as it gives the agent the advantage from New York a month, and from the Pacific six months, more time in which to dispose of the cargo. Steamships running on regular lines carry large quantities of grain. Of course the foregoing has no application to them.

Chartered vessels usually carry but one kind of grain in one cargo.

The freight from the Atlantic ports averages about $5.00 and $5.75 per ton, or 14 to 16 cents per bushel; from the Pacific ports $9 to $12 per ton.

A ship carries about her dead weight in wheat, viz, one-third or one-half more than her measured tonnage.

The wheat is usually shipped in bulk, with a certain proportion in sacks, to cover to more or less depth the bulk wheat.

From the Pacific coast the proportion in sacks is greater, being nearly the entire cargo.

The ship having sailed, her departure from almost any port in either hemisphere is telegraphed to London, and there published in the maritime papers, so that every grain merchant may know just how much grain is afloat, and when and where it may be expected to arrive.

The report for the week ending March 3, 1883, was 21,981,483 bushels, of which six-sevenths was destined for the United Kingdom.

These cargoes of "wheat on passage and for shipment" are kept before the public by their publication in daily evening journals called (one of them now before me) Floating Cargoes Evening List. These publications are very specific as to kind, quality, and price of wheat and name of selling agent, but other matters are of slight interest, so they say "iron ship," "steamer," "sailer," &c.

Cargoes "arrived at ports of call, now on sale," are reported in full. I give one as an illustration, from the Floating Cargoes Evening List, of February 13:

> Wheat. 11. Cargoes.
>
> * * * * * * *
>
> 4300. No. 2, red winter, New York. "BAKRAN." Au. Montgomery Jones, L'p'l 8/Q—Feb'y 8/9–18–48. *Lo*—Cool and good. Cont. B. & H., both incl., sampl. bx at Wallace Hall's, dr. 18 ¼ ft.
>
> * * * * * * *

This translated and understood by the grain merchant is as follows:

> Her cargo is 4,300 quarters (34,400 bushels) from New York. Ship, Bakran, Austria. Montgomery Jones, of Liverpool, agent. She sailed January 8; is at Queenstown; arrived February 8 or 9; has 18 days for unloading, and 48 hours for orders; was inspected by *Lo*. Cargo is cool and good. Can be sent to the Continent, to Bordeaux, or Hamburg, or any place between; the sample of cargo is at Wallace Hall's, London. Her draft is 18 feet 3 inches.

In addition to these announcements the agent, whether at Liverpool, London, or Paris, communicates with the grain merchants of England and the Continent in his endeavors to sell to the best advantage. Employing the telegraph he keeps as close relation with buyers over a stretch of a thousand miles, say from Marseilles to Hamburg and all intermediate ports, as with those of his own city; bids, offers, acceptances, contracts, and guaranties are made with about the same "certainty, celerity, and security," as if on his own bourse.

One of these dispatches and its answer is given as a sample:

[Telegram from Liverpool to Nantes.]

Firm. Unsold, Mary Jones forty-seven three pence U. K. Casablanca will come forty-seven. Market firm.

WHITE.

[Translation.]

I make a firm offer if unsold, on receipt of reply, of the cargo of wheat on the vessel Mary Jones, at forty-seven shillings and three pence per quarter. She is for the United Kingdom, which means her cargo is to be sold on American terms.

The ship Casablanca has arrived, and her cargo is for sale at forty-seven shillings per quarter. Market firm.

UNFAVORABLE ANSWER.

Forty-seven three, Jones, too high. Offer forty-six six pence. Nazaire market quiet.

The measure for wheat in the United States is the bushel; in England it is the "quarter," which is, in round numbers, equivalent to eight bushels, but exactly it is 480 pounds avoirdupois for wheat from the Atlantic coast—500 pounds from California.

The prices asked for "cargoes on passage" in the Evening List, before referred to, and which I cite merely as an illustration, are as follows: 39*s*. 6*d*. to 44*s*. 3*d*. for Black Sea and East India wheat; 46*s*. 6*d*. to 50*s*. 3*d*. for Australian wheat; 43*s*. 9*d*. to 44*s*. for Chilian wheat; 46*s*. 3*d*. to 47*s*. 6*d*. for Atlantic wheat, 480 pounds; 47*s*. 6*d*. to 50*s*. 6*d*. for Pacific wheat, 500 pounds.

The latter items reduced to United States coinage and measure is equivalent to a price from $1.39 to $1.51½ per bushel for American wheat. This represents cost, freight, and insurance to the United Kingdom.

The vessel having arrived at Cork or Falmouth "for orders," and then or soon after her cargo been sold, she receives "orders" for her final destination, which, I will suppose, in the present case to be Nantes.

The freight additional is about 10 per cent. on that from New York, but is sometimes specified to be a sum certain—from 1½ to 3 cents per bushel.

Nantes is fast growing in importance in grain importations, nearly all of which come from the United States. This trade has grown up entirely since 1878. Before that time there was no United States trade in wheat.

Years.	Wheat imported from United States.	Wheat from all other countries.
1878 .... Bushels..	374, 624	40, 753
1879 .... do	1, 058, 417	58, 196
1880 .... do	1, 952. 188	10, 963
1881 .... do	443, 764	60, 229
1882 .... do	1, 587, 013	....

The following is a list of the port charges and expenses (illustration simply) at Nantes and St. Nazaire respectively, the former for a ship 446 tons register, the latter 1,000 tons register—sailing vessels from America:

Charges.	Nantes: Vessel of 446 tons.	St. Nazaire: Vessel of 1,000 tons.
1. Pilotage from sea to St. Nazaire	$58 77	98 00
2. Entry of vessel at custom-house	2 40	2 40
3. Leat protest at custom-house	1 20	1 20
4. Wharfage and quay dues	89 20	200 00
5. Sanitary dues and passport	13 43	30 00
6. Brokerage at 10 cents per ton, delivered	47 10	150 00
7. Leat protest at tribunal of commerce	5 42	5 58
8. Ballast, wanted 1 foot; Nazaire, 2 feet	36 00	200 00
9. Clearance at the custom-house	2 40	2 40
10. Stamps, postage, telegrams	1 10	5 00
11. Pilotage from St. Nazaire to sea	13 20	32 00
12 Fireman and watchman	13 00	10 00
13. Manifest out	1 20	20
Pilotage from St. Nazaire to Nantes	29 89	
Towage (two-thirds paid by consignee), Nantes	94 20	
Pilotage down the river	29 89	
Tonnage	50 00	
Request at tribunal to name surveyors		1 72
Assisting vessel into dock		12 02
Stamps on bills of lading	24	24
Cleaning quay		80
Ropes dues		8 82
Paid to surveyors		20 00
Paid for water		3 00
Assistance out of dock		8 02
Demand at custom-house to clear		20 00
Half interage of cargo		38 00
Unloading cargo, St. Nazaire (16 cents per ton) Tons, 1,500		240 00
Towage from St. Nazaire to sea (inwards as per agreement), outwards		

The cargo is taxed a tariff or import duty of 60 centimes (12 cents) per hundred kilograms, or 3.4 cents per bushel.

Flour is taxed 1 franc and 20 centimes per 100 kilograms.

The cost of cargo after delivery on the deck and its storage or delivery on the railway must of course be borne by the buyer. It is fixed at 1 franc 50 centimes per ton of 1,000 kilograms.

The wheat is usually put at once on the railway to be shipped directly to its ultimate destination, as storage requires double handling and would consume nearly all the expected profit.

A grain merchant of sufficient standing to deal with the grain centers scarcely ever buys less than a cargo.

He then sells it out in smaller lots to the millers, and sometimes to other merchants. These transactions are usually managed at the bourse. The meeting time at the bourse is from 4 to 5.30 o'clock, though the business men have formed a custom of meeting at the post-office, while getting their mail, at from 9 to 10.30 o'clock in the morning.

A sale of a cargo from a vessel means that it shall be delivered free on board the cars at St. Nazaire or Nantes, whichever place the vessel may be in dock.

The retail merchants then seek to make their sales, and to that end they must visit the town and cities in the adjoining departments where the mills are situated, sometimes 50 or may be 100 miles distant. There the same meetings and transactions take place at the bourses of their respective towns.

The meeting at and transactions of the bourse is much more general in Europe than in the United States. Nearly every commercial man makes it his business to attend the bourse daily, and they rarely visit each other at their places of business except by appointment.

Prices, of course, change here with as much rapidity as in the United

States. Those here given are from last quotations but may be changed in a few days. They are inserted as examples.

American wheat: 27.75 to 28.25 francs per 100 kilograms; 22.20 to 22.60 francs per hectoliter, equal to $1.45 to $1.48 per bushel.

French wheat: 25 to 25.50 francs per 100 kilograms; 20 to 20.40 francs per hectoliter of 80 kilograms, equal to $1.29 to $1.34 per bushel.

American flour: 57.50 to 59.50 francs per sack of 159 kilograms; $3.15 to $3.26 per 100 pounds.

French flour: 56 to 61 francs per sack of 109 kilograms; $3.07 to $3.34 per 100 pounds.

In the manner heretofore described there were imported into the port of Nantes during the past year 1,587.000 bushels of wheat.

It may not be uninteresting to the farmer and miller of the United States to know the price and production (outcome) of a given quantity of wheat as calculated in Paris taken from the *Bulletin des Halles*. I do not reduce it to United States measures and prices, fearing mistakes in the intricacies of exchange, but it is easily understood, for it is given in decimal parts.

COST.

	Francs.
100 quintals (100 kilograms) at 26.75 francs	2,675.00
Cost of grinding 100 kilograms, 1.75 francs per quintal	175.00
One month's interest on investment during time it is in the mill and getting to market	13.37
Total estimated cost 100 quintals wheat	2,863.37

PRODUCT.

			Francs.
68.00	quintals of flour, first quality, at 57.25 francs per sack of 159 kilograms, or 36.45 francs per 100 kilograms		2,478.60
3.00	quintals of flour, second quality, at 30 francs		90.00
3.00	quintals of flour, third and fourth quality, 22 francs	66.00	
22.00	quintals offal, bran, &c., 13.00 francs	297.00	
1.50	quintals screenings, 14 francs	21.00	
			384.00
2.50	quintals loss by evaporation, &c		2,952 60
100.00	quintals, estimated gross profit		89.23
	But from this must be deducted the cost of sale, of transportation, of the sacks, &c., which are estimated at		143.17
	Estimated net loss, $10.78		53.94

But it should he remembered that this calculation is made in the interest of the miller, and so should be taken *cum grano salis*.

These calculations are not intended to be more than illustrations. The differences are so many and the bases so changeable, that, though slight, exactness becomes a question of applied mathematics.

For instance, Atlantic wheat is calculated at 480 pounds per quarter; sometimes the hectoliter in France is 80 kilograms, and sometimes 77 or 78 kilograms. The rate of exchange is continually changing. That assumed has been 5.20 francs for one dollar.

The ton is different in England, France, and the United States, being 2,240 pounds, 2,204 and 2,000 pounds respectively. I have only intended to show in a general way how the thing was done.

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Nantes, France, April 1, 1883.

COMMERCIAL RELATIONS BETWEEN FRANCE AND THE UNITED STATES.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The *Economiste Français*, in its regular weekly issue of Saturday, the 24th instant, contains a leading article by its chief editor, Mr. Paul-Leroy Beaulieu, entitled, "The necessity of a commercial treaty with the United States," the salient points of which I deem of moment to translate and submit for the appreciation of the Department, at the same time presenting my own comments. A free translation, though strict in its representations, will, it appears to me, be the best. The Economist says:

> It is important to consider, or, better, to open and secure for our commerce and agriculture this constantly developing and increasing market—yesterday twenty-five, to-day fifty, to-morrow one hundred millions of souls, which is called the North American Union.
>
> The foreign commerce of the United States reaches the round figures of 8,000,000,000 francs ($1,554,000,000). For the past ten years the following table will show the elements of this commerce:

Years.	Exports.	Imports.	Exports.	Excess of imports.
1872-'73	$522, 279, 922	$642, 136, 210	....	$119, 656, 288
1873-'74	586, 283, 040	567, 406, 342	$18, 876, 698	....
1874-'75	513, 442, 711	533, 005, 436	....	19, 562, 725
1875-'76	540, 384, 671	460, 741, 190	79, 643, 481	....
1876-'77	602, 475, 220	451, 323, 126	151, 152, 094	....
1877-'78	694, 865, 766	437, 051, 532	257, 814, 234	....
1878-'79	710, 439, 441	445, 777, 775	264, 661, 666	....
1879-'80	835, 793, 924	667, 885, 565	167, 908, 359	....
1880-'81	902, 377, 346	642, 664, 628	259, 712, 718	....
1881-'82	750, 351, 173	724, 623, 317	25, 727, 856	....

> From the above statement it will easily be seen how great is the foreign commerce of the United States.
>
> From 1872-'73 (fiscal year July 1) to 1881-'82 the increase has been nearly 35 per cent., while the foreign commerce of France remains very nearly stationary.
>
> It must also be said that the fiscal year 1881-'82 (which includes the period under consideration) was not a normal or ordinary year.
>
> The crops in general in the United States were inferior, if not bad.
>
> In 1881 the cotton crop was 18 per cent. inferior to that of 1880; the wheat crop 23 per cent.; the corn crop, 30 per cent.; and the rye, 15 per cent.
>
> Such were the real causes of the decrease of American exports in 1881-'82.
>
> That this commerce will speedily again recover and take still larger proportions may be easily seen, if we have regard to the great immigration which the United States has had during the past fifteen years. This emigration to the United States has been as follows:

	Emigrants.
1867-'68	282, 189
1868-'69	352, 768
1869-'70	387, 203
1870-'71	321, 350
1871-'72	404, 806
1872-'73	459, 803
1873-'74	313, 339
1874-'75	227, 498
1875-'76	169, 986
1876-'77	141, 857
1877-'78	138, 469

	Emigrants.
1878–'79	177,826
1879–'80	457,257
1880–'81	699,431
1881–'82	789,003

> A country which in three years receives 2,000,000 of new inhabitants, the greater part adults, capable of aiding the development of her two and a half to three and a quarter million square miles of land, covering a total superficies of 4,712,500 unexplored miles, is capable of eight times the cultivation of France, which has but 1,528,572 square kilometers, or 330,357 square miles.
>
> Such a country must very soon become the principal market of the world. Her foreign commerce to-day reaching $1,477,500,000 to $1,544,000,000 (or just about the figures of the foreign commerce of France), may reach $3,860,000,000 at the end of the century, and in fifty years from now $9,650,000,000.
>
> What precautions [asks the Economist] have Frenchmen taken to secure a fair proportion of this already great commerce, and which to-morrow may become so enormous?

After some reflections, which are more political than economical, Mr. Beaulieu continues:

> In this immense American market France has a participation, but it is very limited. The United States should hold the first rank among nations for her imports from France, but she really holds only the fourth, and for an amount relatively small for a country from whom we import.
>
> In 1880, France imported from the United States 731,000,000 of francs ($141,083,000), and exported but 332,000,000 francs ($63,056,000); whereas little Switzerland, with her 3,000,000 of population, bought of us 220,000,000 francs ($42,466,000) of merchandise.
>
> Switzerland, therefore, with her population of 2,846,104, bought at the rate $15.44 of our goods for each inhabitant (per head), whereas a citizen of the United States bought scarcely more than $1.25. Who will believe this to be a normal condition of affairs?
>
> What! in a whole year, these American people, so rich in every way, whose capitalists have such colossal fortunes, whose workmen receive such high wages, buy of us only $1.25 per head; that is scarcely more than 2 cents per week!
>
> If the Americans would only come to buy of us per head what the Swiss purchase, our exports to the United States would reach 4,000,000,000 francs ($772,000,000), or the whole total of our French exports.

Mr. Beaulieu then appeals to French statesmen to take broader views than those which have hitherto occupied their minds, and in this, in so far as he refers to home politics, he is strictly correct. Except Gambetta, for ten years there has not been a French statesman who has realized for his country the true means of enriching her commerce and industries by an extension of her relations with other lands through treaties and colonial acquisitions (the latter always, however, in the natural order of accretion.)

Mr. Beaulieu proceeds to say, "That the solution of French difficulties is in a treaty of commerce with the great American Republic." "The situation," he says, "was favorable for this during the past few years, and is even still more so to-day."

And then this young but none the less most distinguished of French political economists indulges in the following remarks which are curious, to say the least, and not unworthy of being substantially quoted:

> Every one knows the financial prosperity of the United States Government.
>
> During the war of secession the United States established enormous taxes, just as we Frenchmen did after 1870, but with this difference, that while we have since plunged into enormous expenses for internal improvements, besides sinecures and pensions, out of all character with our resources, the Americans have had only one serious care, one thought above all others, *i. e.*, to diminish their national debt. This debt of $3,000,000,000 has been reduced to less than $1,800,000,000 or a reduction of $1,200,000,000 while our national debt increases nearly $200,000,000 annually. The Republic of the United States has arrived at that point where she can relax her primitive rigor in the shape of taxes. She has an excess of revenue, *i. e.*, a "surplus" of receipts after all her expenses are paid of (625,000,000 of francs) $120,625,000.

> What to do with this excess? What nation has ever yet had such a windfall?
>
> Here comes in the scene of comedy. It must be remembered that there are in the United States two political parties, one of these actually enjoys power, and is called the Republican, although this appellation should not be construed as to its being more republican than its adversaries. The other party in competition is called the Democratic party. Though there be differences of opinion in this latter party they are generally recognized as being "free traders."
>
> Now the Republican party who to-day had the majority in the expiring Congress in order to cut the ground from under the feet of their adversaries resolved to pass a tariff bill and have passed such with the aid of the Senate and the adhesion of the President, the effect of which will be twofold.
>
> The tariff largely reduces, or suppresses entirely, interior taxes and certain foreign categories of prime necessity, such as sugars and coffees. But it has increased the duties on woolens, wines, &c. With this new tariff our already moderate exports must be further decreased. French champagnes, for example, are taxed 57 cents per bottle, and common wines over 14 cents the litre.

Whereupon the Economist calls upon the French Government to take immediate steps towards securing a commercial treaty with the United States. It cites the already known individual labors of Mr. Leon Chotteau in this behalf, the resolution of Congress in 1879, and concludes by saying that the French minister at Washington, who has now little or nothing to do there, could not be better employed than in seeking to bring about such a convention.

However on some points I may take issue with the Economist, I cannot but agree with it on the general and final subject, the necessity of a commercial treaty between the two countries. I have already, in previous dispatches covering a number of years, argued the desirability of such a convention, and the capital point I have sought to make is that our manufactures would be the greater gain by such treaty.

BENJAMIN F. PEXOTTO,
Consul.

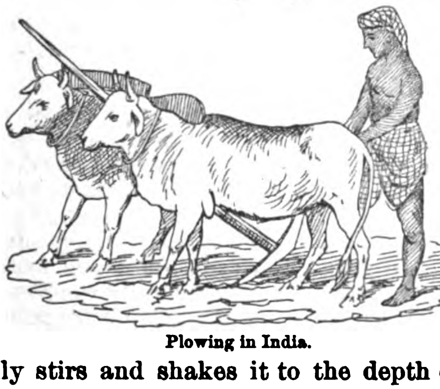
UNITED STATES CONSULATE,
Lyons, March 26, 1833.

AMERICAN PLOWS AND FANNING MILLS FOR INDIA.

REPORT BY CONSUL-GENERAL MATTSON, OF CALCUTTA.

With a view to the exhibition to be opened here next December, I have the honor to present the following facts and suggestions in the hope that some American manufacturers may take action in the matter and avail themselves of the excellent opportunity which that exhibition will undoubtedly afford.

The Indian "ryots" (agriculturists) cultivate 200,000,000 acres of land and plow the same from two to five times every year, with no better implement than an iron-pointed wooden stick,* which does not turn over the soil, but only stirs and shakes it to the depth of 3 to 4 inches.



Plowing in India.

---

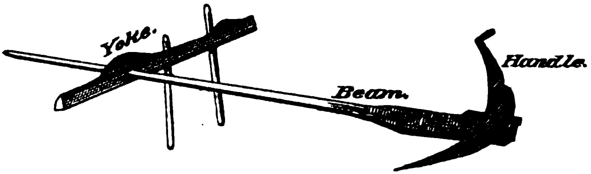
*The accompanying sketches will give an idea of this implement, and also how the pulling gear and the handle or handles of a new Indian plow should be made.

The enormous quantity of small grain annually produced on these 200,000,000 acres is cleaned and separated for food and for the market by the same system of hand winnowing which was in use among the Israelites of old, and which, for the European grain trade at least, is now deemed inefficient.

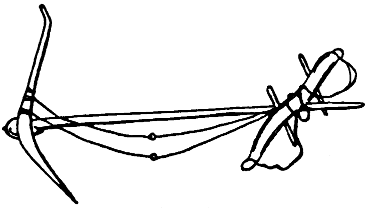
While, for reasons stated in my former reports, agricultural implements, such as are manufactured in the United States, are not adapted to India, there is an important exception in respect to the plow and fanning mill.

THE PLOW.

The small American garden plow which turns a furrow of 8 or 9 inches, and is so light that a ten years' old boy can carry it on his shoulder and a good sized pony can work it in the field, is, in my judgment, the very plow to introduce into India, where an immense market awaits the successful manufacturer. It would, however, have to be made somewhat different from the home model; the beam should be very light and long (much like a common-wagon tongue), with a slight incline upwards, so that the end could be fastened with a clevis to the yoke of a pair of bullocks of the size of common two-year old American country steers (the cattle here are yoked so far apart that there is room close to their hind feet for the working of the plow); the handle or handles should stand nearly upright in order that the plowman may walk so near his cattle that he can readily catch hold of their tails, because the Indian bullock-driver will insist on regulating the motion of his cattle by jerking and twisting their tails near the root with his hands. In all other respects it should be just like our light garden plow with a high polish, so as to scour easy in the wet, heavy soil, but otherwise the finish might be plain and cheap, so that the plow would come within the means of the poor tenantry who compose the agriculturists of India.



Indian plow.



Indian plow.

THE FANNING MILL.

This should be made with special reference to cleaning and separating wheat for the European market, and should be small, light, and cheap. It is very seldom that one ryot has more than 50 or 60 bushels of wheat to clean, and time is of no special object to him; the mill therefore need not be made to do much work in a day, but rather to do it well. A little village community would probably become joint owners of one such mill, but there are 450,000 agricultural villages in India, and in many instances the "zemindar" (land proprietor) would buy it and let it out on hire to his tenants.

Many attempts have been made to introduce these implements from Europe, but so far the samples have proved too heavy and expensive.

There is a universally acknowledged want for both of them, and arrangements can easily be made for their trial at the Government experimental farms.

H. MATTSON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Calcutta, *February* 20, 1883.

THE MANCHESTER PRINT TRADE IN COLOMBIA.

REPORT BY CONSUL SMITH OF CARTHAGENA.

When it is taken into consideration that the most important item of import into Colombia is dry goods, especially prints and similar goods, and that hardly a dollar's worth, unless indirectly, comes from the United States, it becomes a serious concern to the American manufacturers who are endeavoring to extend their trade to all parts of the world, why such a state of affairs exists. It can be safely estimated that the trade in such goods alone with Colombia amounts in value to $2,500,000 annually. It may therefore be pardonable if attention is again called to the Department upon this subject.

Manchester controls the print trade of Colombia, and will continue to do so just so long as our manufacturers do not make a proper effort to secure their legitimate share. Everything is in favor of our manufacturers: they have the cotton on the ground, and use superior machinery, that is an offset to lower wages paid to the English factory operatives. The distance on the voyage is twenty days shorter, the freights one-half less, and the prices asked for the prints about the same. The question naturally arises: Then who is to blame? Is it the buyer or the manufacturer? It is solely the fault of the latter, for the following reasons: He does not pack his goods properly. He does not cut them of the standard length of this country. He will not furnish a great variety of designs to the small purchaser. He makes his goods too heavy. He does not send out commercial agents to "drum up the trade."

The standard length for prints is 23 inches wide and 29 to 30 yards long. The bales should have 50 pieces each and weigh, gross, 125 pounds.

It may be proper to illustrate the mode and style of a Manchester print-house doing business with Colombians.

The house has resident agents in all the towns where it does business. This agent is usually the most prominent merchant in the place and is well known for his honesty and good judgment. It is his duty to keep the house well informed as to the financial standing of its clients, the lives they lead, and whether they are doing business within proper bounds. The commercial traveler of the house puts in an appearance about twice a year, stops at the best hotel, is generally a junior partner, or has stock in the house he represents, is not limited as to his expenses. He calls upon his old friends and makes himself generally agreeable, never talking business, but quietly picking up points all the time. As he knows the standing of the patrons of his house from the resident agent and his own observations, he can govern himself accordingly in selling them a new bill of goods. Or he is on hand armed with a proper power of attorney from his house to act for them in forcing the collec-

3 JUL 83

tion of a bad account, legally, if necessary, but generally amicably. However, he has seldom to resort to either method, for 95 per cent. of his accounts are good. Some of the houses may be slow paper, but in such event due interest is charged.

The failure of a commercial house in this country is of rare occurrence. During a residence in this district of four years I have known of but one business failure. As a rule, the Colombians are very cautious and conservative in their business dealings. The credit given by Manchester houses is nine, twelve, and eighteen months. About five Manchester houses control the print trade of Colombia.

The styles and prices of prints adapted solely for this market are as follows: White ground prints, fancy designs, medium-sized followers—trails—sets, from 15 by 15, 16 by 16, and 17 by 17; none higher, gloss, purple the favorite color. The prices for fancy and white ground prints are:

Cost in Manchester:	*s.* *d.*		*s.* *d.*
15 square die	6	to	6 3
16 square die	6 9	to	7
17 square die	7	to	7 3

The finish is light and firm, with slight face to make luster.

PURPLE PRINTS.

Only two classes are sold in this market, first and second.

First class, 17 square, cost in Manchester 8*s.* 3*d.* of 29 to 30 yards length.

Second class, which is printed on 15 square die, sells in Manchester at 6*s.* 3*d.* to 6*s.* 4½*d.*

Steam prints (not fast colors), 22 to 23 inches wide, of 30 yards length, are sold to the merchants at 4*s.* to 4*s.* 3*d.*

The above quotations I have obtained from the merchants after much inquiry and cautious questioning, and as they have—some twenty firms—given, with but trivial deviation, the same quotation, they can be relied upon.

Pieces are made up 12 inches wide, stitched at both ends, with tickets upon them.

All samples are numbered. So there is no difficulty in ordering the styles one may desire, without sending an elaborate explanation with the order. The weight (gross) per bale is also put on the samples. This is an important item, as duties are paid on gross weight, and a purchaser very naturally desires to know the weight of the article before he gives his order.

To sum up: If the American manufacturer desires to extend his trade with Colombia he must accommodate the wishes and tastes of the purchaser as to mode of packing, weight, variety of design, color, length, and width. Two millions of dollars coming to this country from the United States means that over $2,000,000 worth of Colombian products will go to our country to meet payment for same. What the Colombians desire in prints is mainly lightness in weight and variety in design. Quality is of minor consideration. The less the weight the smaller the customs duties.

EDMUND W. P. SMITH,
Consul.

CONSULATE OF THE UNITED STATES OF AMERICA,
Carthagena, *Colombia*, *April* 10, 1883.

AMERICAN WOODENWARE IN NEW ZEALAND.

REPORT BY CONSUL GRIFFIN OF AUCKLAND.

Nearly all the woodenware imported into New Zealand is of American manufacture, and it is gratifying to me to be able to state that about three-fourths of it is brought here direct.

The value of the imports of woodenware into the colony of New Zealand for the year 1881 was $55,075 against $25,045 for the year 1880, an increase of $30,030. This, of course, is exclusive of certain articles of ironmongery combined with wood, doors, window-sash, and all kinds of office and household furniture, such as chairs, writing desks, tables, &c. If the latter articles were included in the imports the amount would be increased to about $620,000. The woodware trade proper embraces such articles as tubs, pails, buckets, washboards, oars, ax-handles, brush and broom handles, shoe-pegs, wooden screws, clothes-pins, rolling-pins, butter churns, cheese molds, step ladders, bread boards, trays, platters, mallets, croquet and lawn tennis sets, chessmen, checkers, checker-boards, shafts, oak rims, felloes, poles, shade and blind rollers, &c. It is now very generally admitted by dealers and importers that, with few exceptions, all these articles can be manufactured much cheaper in the United States than anywhere else. The choicest wood for such purposes can be obtained in America at very low prices, and there is no other country in the world that has so many ingenious machines for the manufacture of all kinds of woodenware. There are several firms in the United States that have extended their trade here with very little effort. It is well known, not only in New Zealand, but throughout Australasia that Messrs. Crane & McMahon, of New York, have factories and saw-mills in almost every State in the Union, and that their factory at Greensburgh turns out 10,000 spokes and 300 sets of rims per day. Their elm hubs, hickory and oak rims are very popular here.

All the adjustable window-shades used in Auckland are of American manufacture. Hartshorns patent shade roller has been introduced in every city and town in the colony. With the help of this roller the window-shade is easily adjusted. The springs are made of the best tempered steel and conform to exact weights and lengths and each part of the roller is tested by a separate gauge. The automatic stop admits of any required degree of spring being held in reserve, thus providing for any loss of power from diminishing elasticity and allowing for shades of different size and weight. Mr. Hartshorn has received the highest award for his patent shade rollers at every exhibition where they have been put in competition. He carried off the prizes at the international exhibitions held at Sydney and Mellbourne, as well as at the world's fairs at Philadelphia and Paris.

GERMAN AND ENGLISH WOODENWARE.

The small fraction of woodenware imported from England and Germany into New Zealand consists of bread platters, butter prints, egg cups, forks, spoons, wooden faucets, knife cleaners (cylindrical and board), cricket and lawn tennis bats, ninepins, chessmen, checkers, checker-boards, pepper-grinders, &c. Of the articles named above the chessmen, checkers, and boards come from Germany, the rest are of English manufacture. The chief characteristic of English and German woodenware is that they indicate a maximum of labor with a minimum of material, which, of course, is just the reverse of those made in the United States.

The English knife cleaner is so ingeniously contrived that it might well pass for a Yankee invention. It resembles a grindstone in outline. Two or more knife blades, according to the size of the cleaner, are inserted into narrow slits of the cylinder, leaving the handles to project like a ship's wheel. The crank is made to turn exactly like that of a grindstone. Stiff brushes within are caused to revolve by the turning of the crank and the brushes thus rubbing against the knives thoroughly cleanse and brighten them.

The English pepper-grinder sold here is another curious instrument. It is a little larger than an ordinary pepper-box, about 3 inches in high and 1¼ inches in diameter. The guest grinds his own pepper while at the table, which he can do only by humping his back and proceeding as with the intention of boring a hole through the table.

PRICES OF WOODENWARE.

The cost of freight, customs duties, and other charges make the prices of all kinds of woodenware much higher here than in the United States. The duty, however, on woodenware is only 15 per cent. ad valorem, and some articles, such as brush, woodware, buggy shafts, bent wheel rims, carriage shafts, spokes, felloes and naves, saddle-trees, butter churns, axles, axle arms and boxes, ship's blocks, &c., are admitted free. There is no demand here for wooden buckets; galvanized iron ones are used instead.

Cylinder churns, size No. 1, sell here for about $5.50; No. 2, $6.50; No. 3, from $6.50 to $7; No. 4, $8; butter-workers, from $7.50 to $12.50 each. Croquet sets from $3.12½ to $6.25 each. Ax-handles from $2.25 to $2.75 per dozen. Planes from $1 to $1.75 each. Mallets from $2.50 to $5 each. Oars (ash), 6 to 13 feet long, 14 cents per foot, worth only 7½ cents in New York per foot; oars, 14 to 16 feet long, 17 cents per foot, 20, 22 and 24 feet, 23 cents, 28 cents, and 36 cents; towel rollers, $2.50 to $3 per dozen; tubs, $4 per nest; clothes-pins, $1 per 5 gross; wash-boards (wood) $2.25 per nest; wash-boards (zinc) $2.25 to $2.75 per nest; extra, $4 per nest; corn brooms, extra, $6 per dozen; 1¼ pounds, 3 string, painted handles, $4 per dozen; 1¼ pounds, 3 string, $4.40 per dozen; No. 6, velvet hurl, $5.25; shaker brooms, $6 per dozen; whisks, $1.50, and patent socket, 1¼ pounds, $3.75, and patent socket, 1½ pounds, $4 per dozen; pick handles, No. 1, $2.25 per dozen; No. 2, $2 per dozen; painted pails, $3 per dozen; shoe-pegs, $1 per bushel.

NEW ZEALAND WOODENWARE.

New Zealand has developed the largest timber industry in the southern hemisphere. The immense forests of kauri, kahikatea, puiri, and rimu, in the province of Aukland, are fully appreciated by her enterprising inhabitants. The annual output of sawn timber in this province alone is about 70,000,000 feet in addition to 2,000,000 feet of planed timtimber, 6,500 doors, and about $75,000 worth of other wood products. Of the different kinds of timber for manufacturing purposes, the kauri pine is the most valuable. The kauri forests of the province of Auckland, cover over 200,000 acres, exclusive of the land still in possession of the Maoris or natives. The kauri tree, as I have mentioned in former reports, is not found outside of the province of Auckland.

There are 43 saw mills in the province of Auckland, and about 250 in the colony. The value of the lands and buildings in connection with these mills and factories is set down in the last Government returns at $1,885,420. Over 8,000 persons are employed in connection with the timber industry of the colony.

The kauri pine, of which the chief products are made, is more apt to shrink than the pine imported from America. The factories excel in the manufacture of doors, window sash, and various kinds of household furniture, but make only in limited quantities and to special order what is known to the trade as woodenware. Their articles of coopery are worthy of praise, especially their butter kegs, which are made of kauri, totara, and puriri (the last is known as New Zealand oak). Amongst the native woods suitable for the manufacture of woodenware may be mentioned tawa (*Larus tawa*), used like ash, taraire (*Laurus taraire*,) white birch, rewarewa, honeysuckle (*Kinghtia excelsa*). These woods are used in considerable quantities for ax-handles and small cabinet work. Agricultural implements and oars are sometimes made of mangiai, but these articles are not as good as those imported from America. Mapau is another excellent New Zealand wood; it is very tough, and is occasionally used in the manufacture of carpenters' tools.

The great disadvantage the wood manufacturers experience in New Zealand is the high price of labor, and the duties charged on American pine and other timbers.

There are several broom factories in Auckland, which produce excellent brooms at low prices, the broom-corn being imported from the United States free of duty. The handles are made of kauri, which though more inclined to warp than those made of American pine, are very serviceable, of a dark rich color, heavy and strong.

The wash-boards turned out at the Auckland Timber Company are the best made in the colony, and compare favorably with those imported from America. The other factories display very little art in work of this kind. Instead of dovetailing the pieces as in America they fasten them with nails, which detracts not only from their appearance, but durability.

Astonishment is expressed by dealers in woodenware that the Americans do not manufacture butter-prints for the market, for which there is a great demand. Butter-prints, however, like bread platters, must be hand-made, and no machine capable of cutting patterns in hollow hemispheres has as yet been invented.

AMERICAN WOODWORKING MACHINERY.

American woodworking machinery is employed to a greater or less extent in all the principal timber and wooden factories in New Zealand. The Auckland Timber Company uses by far the largest number of American machines in the colony. It would require a good size volume to enumerate all the various kinds of American machinery used at this establishment. Amongst those especially worthy of mention are Boult's carving, molding, and dovetailing machine; Brown & Howes gauge lathe; the Challenge Scroll Saw (Seneca Falls, N. Y.); the Eclipse Perforator; the Variety Wood-turning Lathe (by the Rollstone Machine Company, Fitchburg, Mass.); Howley & Hermanes new style power mortiser, with speed of 800 strokes per minute, &c.

The Variety Wood-turning Lathe will in a few hours make many thousand druggists' boxes, button molds, tassel molds, bonnet stands, balls, knobs, tops, toys, parlor croquet sets, pencil cases, organ-stops, wheels, spools, pipe stems, faucets, checkers, auger, file and chisel handles, &c.

The Eclipse Perforator used by the Auckland Timber Company is said to be the only round-hole power perforating machine ever placed before the public that will do stub and checque work and lift at any given or required point. The cutters are so arranged that they shear out the holes, leaving the sheets free, clear cut and without any burr, and as the punches are run by gear they act independently of each other and run for a long period without wearing out. The cutters are easily sharpened by tapping them on the face with a light hammer. Stub and straight work can be run through at equal speed, as fast as the feeder can put in the sheets three or four together, the work being delivered in the drop-box clean and flat. The timber company also use the Excelsior Lathe, of the Globe Manufacturing Company, Middleton, Conn. This lathe is so simple in construction that it can be used even by unpracticed hands. The length of its bed is 25 inches and the swing is 5¼ inches. The ways are of iron instead of wood. The machine is capable of doing both fine and common work.

The Auckland Timber Company has also an endless variety of American dimension planes, boring machines, molding, mortising, tennoning machines, cut-off and slitting saws, hand sawing machines, planing and molding machine, knives, wood-turning chisels, and gauges, hollow augers, &c. Over 500 hands are employed in the factory of the Auckland Timber Company, and about twice that number in their town and bush saw mills.

COST OF FREIGHT ON WOODENWARE.

The cost of freight on woodenware imported into New Zealand from San Francisco and New York appears to me to be unusually high. The rates of the Pacific Mail Steamship Company on woodenware to Auckland are $15 per ton measurement. The cost on the same goods by sailing vessels from New York to New Zealand is also very high and ranges from $7.50 to $8.25 per ton. The prices of woodenware are a fraction higher in San Francisco than in the eastern cities, but some of the Auckland merchants prefer to pay the additional prices and also the extra cost of freight in order to secure a quick delivery of their goods. Besides there is always considerable delay in the shipment of goods from New York.

The merchants complain that the class of vessels which come here are generally very old, slow, wooden sailing vessels; totally unfit for nice cargo or such goods as are easily damaged. Moreover, it is said that these ships do not come direct to Auckland, but clear for some other New Zealand port, either Lyttleton, Dunedin, or Wellington, and that goods thus shipped are fully six months in reaching their destination, on account of the slow voyage and the delay at the other New Zealand ports. It is claimed that the commission merchant at New York represents that the ship, on discharging a portion of the cargo at the first port, can easily fill up with New Zealand produce for the second port. The prospect of this second freight at high figures has the effect of inducing the master to charter his vessel at a low rate for the round trip, and the shipping agent compels him to sign bills of lading at any price the agent may choose to charge. The owner of the vessel probably gets about $6.25 per ton on the cargo, and the agent or charterer from $8.75 to $10 per ton, thus gaining a profit of about 50 per cent. The merchant here does not object to the profit made by the charterer, but he does object to the long and unnecessary delay in the transportation of his goods. The loss falls principally on the merchant at the second port.

I am fully conscious of the value of the services of the commission man to the importer, but at the same time I cannot help believing that trade upon a large scale should be conducted independently of them. The defense made by the shipping agents is to the effect that the Auckland merchants do not order goods enough to fill a ship, and they are compelled to call at a second port; but even suppose this to be the case, surely small vessels could very easily be chartered for the purpose.

Some of the New York exporters complain that they are in the hands of the shipping agents, and that if they send goods by outside vessels the shipping agents will refuse in the future to carry freight for them. It is always difficult to get at the exact truth in cases of this kind, but the fact nevertheless remains that the great bulk of American merchandise, and especially fine ironmongery, reaches this port by way of London and Sydney.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, N. Z., January 26, 1883.

BEEF CATTLE IN MEXICO AND IN THE UNITED STATES.

REPORT BY CONSUL-GENERAL SUTTON, OF MATAMOROS.

On account of the close relation between the cattle interests of the United States and those of Northern Mexico the report treats of this industry in both countries. The United States is the final arbiter as to demand and price. The supply, of course, comes largely from that portion of the United States lying west of the Mississippi, but, as I show in this report, the prime and best sources, the bases of these herds, must come in the future as they have in the past from Texas and Mexico.

The increased price for such cattle will greatly stimulate cattle raising in Mexico, and the exports thereof will in all probability reach a million dollars annually within a few years.

I have thought that a brief statement of the new rulings under which breeding animals can be entered free might be appropriately published. From the great number of inquiries which I receive I am confident that it would be of value to stockmen, and therefore I have referred to the matter herein.

The value of the cattle-raising industry in the United States is increasing with rapidity, and the magnitude of its future is almost beyond estimate.

The price of the beefsteak is a matter of universal interest. A variation of a few cents per pound makes changes in the living expenses of the millions. Great Britain and the Continent of Europe have of late years come to have a direct interest in this cattle supply of the United States.

While Australia and South America will take some part in furnishing the European imports, the main source is and will continue to be that portion of the United States lying west of the Mississippi. Texas, Iowa, Missouri, Kansas, Nebraska, and the Territories are at present the most important sources of supply.

The total of stock cattle, not including milch cows or oxen, in the United States was, in 1880, 22,500,000. This would give less than one half of a beef to each person in the United States.

The population of the United States increased from 38,500,000 in 1870 to 50,000,000 in 1880, about 3 per cent. This beef cattle increased from about 13,500,000 in 1870, to 22,500,000 in 1880, or about 66 per cent.

The European demand has greatly increased within the last three or four years, and with the new processes of land and ocean shipment this export trade will steadily increase.

The following table, compiled from statistics of the census of 1880, shows the visible supply of such cattle in all the States of the Union at that date, with per cent. of increase from 1870:

EAST OF THE MISSISSIPPI.

States.	No. of cattle.	Increase.
		Per cent.
3. Illinois	1,513,063	44
5. Ohio	1,084,917	13
7. Indiana	864,846	40
8. New York	862,233	37
9. Pennsylvania	861,019	42
Five States	5,188,078	Av'age, 41
10. Wisconsin	622,005	88
12. Georgia	544,812	32
13. Kentucky	505,746	32
17. Michigan	466,660	79
15. Tennessee	452,462	34
18. Florida	409,055	27
19. Alabama	404,213	57
20. Virginia	388,414	40
21. Mississippi	387,452	44
22. North Carolina	375,105	34
26. West Virginia	288,845	62
29. South Carolina	199,321	50
30. Vermont	167,204	48
33. Maine	140,527	— 2
35. Maryland	117,387	20
36. New Hampshire	112,689	23
38. Massachusetts	99,045	20
39. Connecticut	92,149	16
42. New Jersey	69,786	16
45. Delaware	20,450	8
46. Rhode Island	10,601	9
Twenty-one States	5,878,928	35
Twenty-six States	11,062,006	38

WEST OF THE MISSISSIPPI.

1. Texas	3,387,967	15
2. Iowa	1,755,343	186
4. Missouri	1,410,507	105
6. Kansas	1,015,935	342
11. Nebraska	590,129	1,210
Five States	8,159,881	Av'age, 352
16. California	451,941	— 2
17. Arkansas	433,392	124
23. Oregon	352,561	408
24. Minnesota	347,161	138
25. Colorado	315,898	687
27. Louisiana	282,418	41

WEST OF THE MISSISSIPPI—Continued.

States.	No. of cattle.	Increase.
		Per cent.
28. Wyoming	273,625	278
31. Montana	160,143	610
32. Nevada	158,137	591
34. New Mexico	137,314	543
37. Washington	103,111	266
40. Dakota	88,825	1,335
41. Idaho	71,292	1,137
43. Utah	58,680	224
44. Arizona	34,843	866
Seven States and eight Territories	3,258,432	Av'age, 696
Twelve States and eight Territories	11,418,313	Av'age, 524
Thirty-eight States and eight Territories	22,488,590	Av'age, 66

A study of the foregoing table is of much interest. Taking the five States of Ohio, Indiana, Illinois, New York, and Pennsylvania, lying east of the Mississippi, we find 5,200,000 cattle, and that the rate of increase for the ten years has been on an average 4 per cent. per annum. In the other twenty-one States east of the Mississippi were 5,874,000 head, which represented an average increase per annum of 35 per cent. Total east of the Mississippi 11,062,000 head, which represented an annual increase of 3.8 per cent. West of the Mississippi, in the five States of Texas, Iowa, Missouri, Kansas, and Nebraska, were 8,159,881 head, an average annual increase of 35.2 per cent.

In seven other States and eight Territories west of the Mississippi were 3,258,432, an average annual increase of 69.6 per cent.

Taking the territory west of the river, twelve States and eight Territories, and we find a total of 11,418,313, and an annual increase of 52.4 per cent.

These figures show the immense development of the cattle-raising industry in the West during that period. Since 1880 the ratio of increase west of the Mississippi has probably been about the same as the previous average, say 50 per cent. annually. At this date, nearly three years later, there are thus in that section from 25,000,000 to 30,000,000 of such cattle. A rough estimate of their value would be from $25 to $50 each.

Taking the medium both of numbers and prices, and we have 27,500,000 head, at $37.50 each, or a money value of $1,031,125,000. The demand for cattle is seemingly inexhaustible, and the pastures of the West will support two, three, five, or perhaps even ten times as many as are now there.

While the West is thus rapidly increasing its stock, it has yet to supply the larger part of the eastern cities and foreign demand. The Eastern and Southern States supply the local demands, and send some cattle to the larger cities. New York, Boston, Philadelphia, and other large cities not only use the eastern supply, but draw more and more each year from the West.

Chicago, Saint Louis, and Kansas City are the chief western centers of the beef-cattle trade. In those cities and farther west some idea may be obtained of the immense number of cattle sent from the plains. To make good this drain and to supply the demand for more cattle to start the thousands of ranches all over the West is the great problem of the present. One year the stockman goes to Oregon, another to Arizona or New Mexico or California after breeders for the foundation of his herds. His main reliance has been, however, the empire State of the Southwest, Texas. The preceding table shows very plainly how many cattle have been driven out of that State. There is no spot in the world where cattle can be raised so cheaply and at the same time be so near an unfailing market as on the boundless plains of Texas. Yet so great has been this demand, and so many cattle were driven from Texas between 1870 and 1880, that the average annual increase in that time was only 15.10 per cent., while in all the States and Territories west of the Mississippi the average annual increase was 52.4 per cent. In Wyoming it was 278 per cent., in Dakota, 133.5 per cent., in Nebraska, 121 per cent., in Idaho, 113.7 per cent, in Arizona, 86.6 per, cent., and in Colorado, 68.7 per cent. increase per annum. California, too, shows the drain upon her supply by the fact that she lost 2 per cent. in those ten years.

In the search for stock to grow up to beef on these plains the whole available east and center of the United States is stripped of calves and young cattle. All these sources of supply are inadequate; and not only is the supply inadequate, but there are other considerations of great importance to stockmen and to eaters of beef.

It needs a hardy class of cattle on those plains to stand the severe extremes of heat and cold. The young stock from the East is too tender, too much civilized, in fact, to stand the test, and in a severe winter 30 per cent. of them die from cold and hunger. In Texas the cattle are more hardy, and hence the great demand for Texas cattle to make the basis of the herds.

Now, while Texas has nearly or quite 4,000,000 such cattle, yet the conditions are so favorable and markets are so good, rancheros there prefer to keep all breeders and sell only the three and four year old steers to be driven north and west to fatten for beef. Their breeding cows and heifers, the hardy and prolific base of their herds, they will not sell except for high prices. Hence for the last two or three years the cattle men of Colorado and that section have begun to look beyond Texas and into Northern Mexico.

Roughly speaking, a line drawn from Guaymas, on the Gulf of California, to Tampico, on the Gulf of Mexico, represents the chief cattle range of Northern Mexico. From this enormous territory deduct one-third for mountains, deserts, and tillable land, and the remaining two-thirds is grazing land.

Over all this territory, in every extreme of climate, from the thin, cold air of the high plateau to the low, hot lands of the coast of Tamaulipas, range the hardy progenitors of the Texas cattle—long-horned, large-boned, gaunt, immense beasts; they are simply *frames* upon which the sweet grasses of Kansas and the West will make fine beef. Their greatest value, however, is not for themselves alone. Descendants of the fine stock brought from Spain by the Spanish conquerors, nature has adapted them through generations of neglect to their wild life. They are hardy; they are wild; and while their rating as to class is low, yet the good blood of the past generations is still there. As I have said, they themselves will make good beef when fattened on the western plains; but crossed with the improved bulls from the East or from Europe, one or two crosses brings them far above what the same would do for the ordinary class of cattle in the United States. Not only do they come up to a high grade of stock much more rapidly than the ordinary American cattle, but they still retain their great frames, the dark red color of the meat, and breed with great rapidity, but they are what the western stockmen admiringly call "good rustlers." They still retain their wildness, and hence do not stay tamely around water-holes eating the short, poor grass, as do the American stock, getting thin and weak, to die in the first great storm. They multiply rapidly, stay out in the good grass and brush, have large frames, fatten rapidly, and make the best grass-fed beef that goes East. No wonder that the stockmen of our plains are anxious to get them.

This portion of Northern Mexico would include the States of Sonora, Chihuahua, Coahuila, Nuevo Leon, and Tamaulipas, and portions of other States.

In this Territory are, on a reasonable estimate and from latest data available, an area of 300,000 square miles, and about a million of inhabitants. Of this Territory probably two-thirds is suitable for, and more or less used for, the raising of cattle, horses, goats, sheep, and mules. I can only roughly estimate the number of live animals in this Territory.

In Texas, with an area of 237,000 square miles, there were, in 1880, about 7,500,000 such animals, divided as follows: neat cattle, 4,000,000; horses, 800,000; mules and asses, 132,000; sheep, 2,500,000.

In this portion of Northern Mexico, with an area of, say, 300,000 square miles, there may be now something like 6,500,000 animals, and which I estimate as being divided about as follows: goats, 2,500,000; neat cattle, 1,500,000; horses, 1,000,000; sheep, 1,000,000, and mules, 500,000.

The difficulty of obtaining reliable statistics in Mexico makes it impossible for me, at this time, to do more than give the above rough estimate. I hope, however, during the year to obtain some reliable data on this industry.

The exports of live animals from Northern Mexico have been mostly of breeding cattle, beeves, saddle-horses, and ewes.

The annual amount has not been large. For the year ending June 30, 1881, the exports of live animals from Mexico to the United States amounted to $314,272, of which $296,262 came in on this frontier. Of this amount $67,768 was imported into the customs district of Brazos de Santiago; $80,224 into the district of Corpus Christi; $43,216 into that of Saluria, and $105,054 into that of El Paso and New Mexico. This trade has been of but trifling importance until within the last year.

The *declared exports* from this district for the year ending June 30, 1882, were $169,160, as compared with $48,500 for the previous year.

For the quarter ending March 31, 1883, the exports are not yet footed up, but will be about $100,000, as compared with $62,030 for the same quarter of 1882, and $21,994 for the same quarter of 1881.

All the imports of live animals from Mexico have in the past paid an ad valorem duty of 20 per cent. in the United States. The law of 1871 (Revised Statutes, section 2505) provides that animals alive specially imported from beyond seas for breeding purposes should be free of duty, under such regulations as should be prescribed by the Secretary of the Treasury. The Secretary of the Treasury made substantially the following regulations: A special invoice thereof as breeding animals was to be presented to the consul; the shipper was to swear that same were of superior stock adapted to improve the breed in the United States. To this the consul was to add that, to the best of his information and belief, the above animals were intended for breeding purposes.

On arrival in the United States the owner must produce the above and make oath to a similar statement. The collector must be satisfied that said animals are of superior stock adapted to improving the breed in the United States.

The term "beyond seas" was held to mean anywhere beyond the limits of the United States.

This interpretation of the law seems to have held for all these years, and until last January.

Under date of January 25, 1883, a circular was issued from the Treasury Department giving a decision of the United States Supreme Court, in a case from Maine, to the effect that the modifying clause as to being of superior stock adapted to improving the breed in the United States, was unlawful, and ordering the duties returned to the importer. The circular then revoked so much of section 383 of the Treasury Regulations of 1874 as was affected by the decision of the court. The question as to "beyond seas" was not decided by the court nor changed by the circular. This left the law in force as it really read, instead of as modified for so many years; and if the definition "beyond seas" was good law, all breeding animals could be imported free.

Desiring to have the matter definitely settled, Mr. J. K. Walker, of Goliad, Texas, appealed to me for the proper certificate. As I had no authority to change consular form No. 66, and as he could not swear to all required thereby, he finally presented to me the regular usual invoice containing some 600 animals which he intended for breeding-purposes. Of these 15 were bulls, the remainder cows or heifers. He also handed me and swore to an affidavit that he had purchased said animals to take to the United States especially for breeding purposes, and asked that I give a certificate as to my information and belief. As he made oath that he had ranches in Texas, and was engaged in raising such animals, swore to the affidavit, had ample evidence to prove prior intentions, a good character, &c., I gave him a certificate that I did so believe. On his making entry at Brownsville, Texas, he complied with all the requisites, and had no difficulty in proving to the satisfaction of the collector that his statement was true.

Under the Treasury regulations they should have been admitted free without further delay, but the collector, not caring to take so great a responsibility, asked for instructions from the Treasury. The reply came promptly to release the stock.

This is of course a test case, and in future any person who can satisfy the consul and collector as to the truth of his statement can pass certain classes of animals free of duty.

It is to be hoped that instructions will soon be given to show what evidence a consul should require to be satisfied. As it now is, it is a very wide discretion to leave in any person's hands.

The classes of animals which may properly be entered free are mares, fillies, cows, heifers, ewes, and she goats. A limited number of stallions, bulls, and he goats may in some cases be properly imported with the other stock. The decision in this test case is already known the whole length and width of this frontier. Stockmen in Texas, New Mexico, Arizona, Kansas, Colorado, &c., will take full advantage of it and go to Mexico in greater numbers for breeders. It will also give a great impulse to the cattle-raising industry in Northern Mexico. Before this was known conditions were so favorable that large numbers of American and English stockmen had started ranches. Land can be found in such immense tracts, at such low prices, taxes are so low, labor is so cheap, the climate is so favorable, that even with all the risk and expense of living in Mexico and paying an ad valorem duty of 20 per cent. on the cattle sent to the United States they had figured out an ample margin of profit. By the decision of the court one half of their stock, when properly invoiced, will go into the United States free of duty.

The demand is so much greater than the supply that it will hardly change prices thereof perceptibly, but will simply add 20 per cent. to the value of one-half their stock.

In the States of Chihuahua, Coahuila, and Nuevo Leon a large amount of grazing land has already been purchased, and the active prospecting has considerably increased prices. In Tamaulipas but little has been done, as it lies off the line of the railways which are being most actively constructed and along the lines of which stockmen have mostly followed.

In this State of Tamaulipas, however, is perhaps the most perfect breeding and grazing country for cattle and horses in the world. There is more water than in Texas, the soil is very rich, and if it does not rain there are very heavy dews to keep the grass green. The State has a front of about 250 miles along the Rio Grande and about 300 miles along the Gulf of Mexico. Unlike the other States of Northern Mexico the mountains do not cut it all up into narrow valleys. The larger portion is very level, and in the whole State there is only a very small portion of waste lands or mountains. Back 50 miles from the frontier to where Americans can buy real estate the people live in the real old feudal manner.

Somewhere in there toward San Fernando, Soto la Marina, Victoria, Tula, or thereabouts, is, in my opinion, the best opening for stockmen to buy cattle and horses for export or ranches on which to breed them.

W. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, April 13, 1883.

THE ALLEGED BRADFORD ESTATE IN GREAT BRITAIN.

REPORT BY CONSUL-GENERAL MERRITT, OF LONDON.

Periodically there breaks out in the United States a mania among certain families that they are entitled to vast estates in Great Britain, the proceeds of which are supposed to be lying in the vaults of the Bank of England, merely awaiting the demand of the "missing heirs" to be forthwith paid. The absurdity of these pretensions has so often been exposed that it seems almost an unnecessary waste of labor to prick another bubble of the same kind that has appeared of late in the United States, where the alleged "heirs" of Gov. William Bradford, first governor of the Plymouth Colony, imagine themselves entitled to the sum of $100,000,000, the accumulated principal and interest of his estate, said to have been left in England over two hundred years ago.

It appears that the present instance of the inheritance folly was caused by some irresponsible paragraph in a newspaper in a Western State, which, having been extensively copied, has caused many letters of inquiry to be addressed to this office, asking that the statement be investigated; and, judging by the number of these letters, I cannot refrain from saying that no one of the Pilgrim Fathers has left behind him so numerous a progeny as Governor Bradford.

Although I was well aware that the "Bradford estate" was like scores that have appeared before, I addressed a letter on the subject to the Bank of England, and received the following statement in reply:

BANK OF ENGLAND, *April* 10, 1883.

E. A. MERRITT, Esq.,
United States Consul-General:

DEAR SIR: I beg to acknowledge the receipt of your letter of the 9th instant, and to inform you that there is no unclaimed stock or money recorded in the books of the bank in the name of Gov. William Bradford, nor is there, so far as I am aware, any foundation for the assertion that there is.

The only unclaimed property of which the bank has cognizance is such as is invested in government stock or annuities, and of this they have no knowledge beyond the actual name or names in which it is inscribed in their books.

Stock and annuities, the dividends on which are unclaimed for ten years, and isolated dividends similarly unclaimed, are transferred to the commissioners for the reduction of the national debt; but immediately on such transfer, notice is sent to the stockholder at the address registered in the bank-book, and pains are taken to discover him or his representatives, who can at any time, on furnishing satisfactory proof of their title, reclaim the stock, annuities, or dividends so transferred.

There is no limitation as to the time when such reclaim can be made. The bank receives very numerous applications for unclaimed money from America, only a fractional percentage of which refer to funds in existence. These inquiries are always answered, and any means that you can take to spare the supposed claimants the trouble, anxiety, and expense into which they are led by designing persons would at the same time confer a boon on them and spare the bank much unnecessary trouble.

I am, &c.,
S. O. GRAY,
Chief Accountant.

This letter, with the accompanying circulars of the bank on the subject, give full information of the position of the bank in the matter of unclaimed estates, and if well known in the United States might be of some service in putting a check to this ever-recurring inheritance folly; but the experience of the past forbids the hope that so alluring a fraud will not always find victims, however often or thoroughly the fraud may be exposed.

E. A. MERRITT,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
London, May 5, 1883.

[First inclosure in Consul-General Merritt's report.]

Unclaimed stocks and dividends in the Bank of England.

CHIEF ACCOUNTANT'S OFFICE, BANK OF ENGLAND,
May 30, 1881.

Persons inquiring for unclaimed stocks and dividends in the public funds of England and India, to which they believe they are entitled, must supply the following particulars:

1. The names and full addresses of the persons in whose names the stock is supposed to stand.
2. The name of the stock and its amount.
3. The approximate date of its investment.

As the bank have nothing to guide them in these searches but the names of the stockholders, and as the same or very similar names often recur a great number of times, it is essential that the above information should be given with approximate correctness.

The bank are bound by law not to permit any dealing with stocks and dividends except by the persons in whose names they stand, or, in the event of the decease of those persons, by their legal personal representatives (so constituted by the high court of justice, probate division). Failing either qualification, a claimant may institute proceedings in the court of chancery. It is therefore indispensable that applicants should establish their right to deal with the fund in question either as stockholders or as such representatives, as well as show that the said fund is identical with an account in the bank books.

The bank are in no way custodians of any real property whatsoever, nor have they any knowledge of any of the property of persons dying intestate, nor of the proceeds of estates in chancery, nor of unclaimed dividends on estates in bankruptcy. And further, as they have likewise no knowledge of the purposes for which investments are made it is useless for claimants to inquire for deposits or investments supposed to be in existence for their *benefit* or for the *benefit* of other persons.

[Second inclosure in Consul-General Merritt's report.]

Instructions for the recovery of dividends which have been paid to the commissioners for the reduction of the national debt under the national-debt act, 1870, *and previous acts.*

When dividends have been paid over to the commissioners for the reduction of the national debt, in consequence of their remaining unclaimed, application for payment of the same may be made to the governor of the Bank of England.

In the case of sole accounts application must be made by the stockholder, or by his legal personal representative or representatives, if the stockholder be deceased; and in the case of joint accounts by the survivor or survivors, or one of them, or by the legal personal representative or representatives of the last survivor; and the cause of the non-receipt of the dividends, and whether the applicant or applicants own the stock absolutely or as trustee or trustees must be stated. If the stock is trust property the nature of the trust and the name or names of the person or persons beneficially interested must be set forth as the beneficiary or beneficiaries will be required to concur in the application.

In the event of the governor of the Bank of England not being satisfied of the right of the person or persons making the claim the claimant or claimants may petition the court of chancery. (33 and 34 Vict., ch. 71, sec. 55.)

When the total amount of the dividends exceeds twenty pounds they cannot be paid until three months after particulars of the claim have been advertised. (33 and 34 Vict., ch. 71, secs. 56 and 57.)

(The advertisements will be prepared by the bank, but they must be inserted by and at the expense of the applicant [or applicants], who must furnish the bank with copies of the newspapers.)

All communications with respect to unclaimed stock and dividends should be addressed to the "accountant-general, Bank of England, E. C."

Applications should be written on foolscap paper—on one side only. The following is intended as a guide:

To the Governor of the Bank of England:

SIR: ——— dividend [*s*] on [*here state the particulars of the stock*] formerly standing in the name [*s*] of [*here state the names and descriptions as recorded in the bank books*], having been paid over to the commissioners for the reduction of the national debt in consequence of its [*or their*] remaining unclaimed for ten years and upwards, I [*or we*] as the stockholder [*or as one of the stockholders, or as the stockholders, or as the legal personal representative* [*s*] *of the stockholder, or as the legal personal representative* [*s*] *of the last surviving stockholder, as the case may be*], request that you will direct the amount of the dividends to be paid to me [*or us*].

[*Here state the cause of the dividends remaining unreceived, and whether the dividends are the property of the applicant or applicants absolutely or in trust.*

If the stock is in trust name the beneficiaries and describe the deeds giving them their interest.

N. B.—It may be necessary to exhibit the deeds.]

I am [*or we are*], sir, your obedient servant [*or servants*],

——— ———.

Address:
Date:

As the person [*or persons*] beneficially interested in this stock I [*or we*] concur in this application.

——— ———.

Address:
Date:

Ten days after the application has been lodged, or after the expiration of the period named in the advertisements, and provided there has been no intimation to the contrary and no counterclaim, the dividends will be payable to the applicant [or applicants] who must attend in person or by attorney at the chief accountant's office, Bank of England. Applicants, when attending in person, must be accompanied by a banker or stockholder for the purpose of identification.

COMMERCIAL TRAVELERS AND TRADE JOURNALS IN SOUTH AMERICA.

REPORT BY CONSUL SMITH, OF CARTHAGENA, UNITED STATES OF COLOMBIA.

Since holding this post I have met with but one representative of an American commercial house. In my opinion the absence of these gentlemen is, more than anything else, the cause of our trade with this country not being more rapidly extended.

There is nothing like being on the ground to sell one's wares. Advertisements, price-lists, trade journals, catalogues, &c., have done much to pave the way towards introducing our manufactures, but they cannot do all. It is certainly worth the experiment on the part of the American manufacturer to send to South American countries, especially Colombia and Venezuela, a representative to introduce his line of goods. It is not necessary for such agent to speak Spanish, as is eroneously supposed, for nearly all the merchants speak English. Besides, the commercial language in Spanish can soon be acquired. In bringing his samples with him the commercial traveler must have them in pieces, if possible, otherwise full duties will be charged by the custom-house, the same as in merchandise.

All baggage over 100 kilograms in weight must pay a duty of 60 cents per kilogram, gross weight. The customs regulations state that samples in *pieces*, in packages not exceeding in weight 25 kilograms, may enter free of duty. The custom of the European houses, so I have been informed, is to send these packages of samples to their different customers a package at a time, and when their representatives arrive they can take them along with them to any part of the country without molestation, as the packages have been properly and duly entered through the merchant to whom the samples were consigned. English, French, and German houses have their agents constantly traveling through this country, which is certainly a practical proof that it pays them to do so.

It is an undeniable fact that such journals as the American Mail and Exporter, the American Exporter, and their class have had an effect of calling the attention of Colombians to the great extent and variety of American products and manufactures. These journals have quite a circulation among the merchants of this district, who pass them from hand to hand. Immediate attention is attracted to advertisements in these papers by the handsome illustrations of the articles advertised, which also state the prices and weights. By such means, also, the manufacturer is brought into direct contact with the buyer, thus dispensing with the expensive medium of the commission merchant.

More than one merchant has informed me that by reading such class of journals his attention was drawn towards the United States as a better market for purchase and sale than Europe; and, moreover, he had saved money by finding out it was better, when possible, to deal with the manufacturer direct. Catalogues sent to this country should be written in Spanish, the price and weight of every article specified; I mean gross weight when packed. They should also be profusely illustrated. This consulate will be pleased to receive such catalogues, advertisements, &c., and distribute them where "they may do the most good."

Advertisements printed on fans, or framed, pay high duties at the custom-house.

EDMUND W. P. SMITH,
Consul.

UNITED STATES CONSULATE,
Carthagena, Colombia, April 15, 1883.

PROHIBITION OF AMERICAN PORK IN FRANCE.

REPORT BY CONSUL RHODES, OF ROUEN, TRANSMITTING PETITION OF THE AMERICAN PORK AND LARD EXCHANGE OF BORDEAUX TO THE MINISTER OF COMMERCE

At the request of the members of the American Pork and Lard Exchange of Bordeaux, I transmit with this their petition to the French minister of commerce, urging the abrogation of the measure against American pork, in which the attention of the minister is especially directed to the danger of reprisals on the part of the United States Government.

ALBERT RHODES,
Consul.

UNITED STATES CONSULATE,
Rouen, April 4, 1883.

BORDEAUX, *April* 4, 1883.

To the Minister of Commerce, Paris:

SIR: We, the undersigned dealers at Bordeaux in American salt meats and lard, have the honor to solicit from your excellency the fruition of the promises so frequently repeated in answer to our petitions respecting the repeal of the decree of February 18, 1881.

The solution of this question can no longer be delayed. Indeed it is already cleared up, and our ports should now be opened for the free importation of the abovementioned meats, which are indispensable articles of food for the poor classes, and the privation of which has so painfully increased the cost of living for the laboring population.

The spontaneous and disinterested representations addressed to your excellency by the presidents and delegates of the Chambers of Commerce of Paris, Marseilles, Bordeaux, and Havre have led us to hope that the just claims, couched in such urgent terms by the most eminent members of the French commercial body, might have brought about the immediate repeal of the prohibitive decree, and that your excellency would thereby bring to a close this condition of affairs, which is absolutely pernicious to the industrial and commercial interests of our country.

In granting, however, a favorable decision to these just claims, we learn with regret that your excellency proposes committing for consideration a project for submitting said salt meats, on their entry into France, to a refrigerating process, against the adoption of which we most energetically protest.

We are aware that a patent has been taken out some years ago for a process of preserving meats by refrigeration. The proprietors of the process have been endeavoring to find means of utilizing their invention, but it seems with but small success, since at this present time they are desirous of having it adopted by the Government, and thereby secure to themselves large and easy profits.

The application of this process would be ruinous, and would completely hamper the trade. The constant handling the meats must be subjected to for refrigeration, the unpacking, the necessary grading for storage, the repacking, &c., would cause such increase of cost and such a deterioration of quality that it would be simply folly for any serious merchant to lay himself open to such risks.

To these drawbacks, which by themselves are ample reasons for the rejection of such project, we further observe that it would seem to us impossible that any meat subjected to the action of extreme cold and afterwards brought to a higher temperature could be preserved, and this affirmation we are ready to maintain, notwithstanding the laboratory experiments which have been made with a single ham. The trade would be so hampered and exposed to so many hidden risks that it would no longer contain any element of surety in engaging therein.

Of all the processes hitherto proposed, the refrigeration is that which we most positively reject. If the most part of all others contain objections of almost equal gravity, there still remains one which has been already proved, and that is the free circulation, which for twenty years has never given rise to any complaint, nor been the cause of a single accident.

The solution that we ask of your excellency, is to return to the common law, and thus only as justice and reparation for the evil caused by the decree of February 18. We ask it not only in the interest of our trade, but in the interests of the public in general. This deplorable law has had the effect of provoking the American press to a series of violent and unjust attacks against all food products exported from France to the United States, and should these attacks be continued, they must necessarily depreciate said products, and finally drive them out of that vast and important market.

And still further, the Government of the United States has been seriously menacing French commerce with reprisals, and these menaces are already being put into execution. The increase of entry duties on our wines is of such a nature as to reduce considerably the output. These results we have already foreseen as the inevitable consequences of the decree of February 18, notwithstanding the affirmations to the contrary of interested parties, and we declare positively that the refrigerating process can never be considered as a measure of reparation, containing as it does all the effects of prohibition ; indeed, it is merely another and concealed method of perpetuating it. Our Government will most certainly never succeed by this means in breaking down the barriers raised against our products by the new tariff.

We are aware how warmly your excellency is interested in our national commerce, and we are convinced that you will give due consideration to the foregoing remarks which we have the honor to submit to you, and which we hope will be favorably received.

We beg your excellency to accept the assurance of our deep respect.

(Signatures.)

GERMAN PROHIBITION.

REPORT BY CONSUL-GENERAL VOGELER, OF FRANKFORT-ON-THE-MAIN, ON THE RESOLUTION OF THE GERMAN BUNDESRATH PROHIBITING THE IMPORTATION OF AMERICAN HOG-MEAT.

In my report on the tariff laws and customs regulations of Germany, dated January 25, 1882, I showed that the principal reason for the many devices resorted to by German customs officials to impose a higher rate of duty on certain articles than the law contemplated, was not a direct purpose to discriminate against goods of American production or manufacture, because these devices affected importations from other countries as well as those from the United States, but that they proceeded rather from a desire to propitiate and minister to that protective spirit which, since the year 1879, was known to have come into favor with the leading spirits of the German government.

When I now refer to the resolution adopted by the German Bundesrath on the 21st day of February, 1883, prohibiting the importation of American hog-meat, a subject which I am aware has engaged the attention of the Department for several weeks, I do so merely to call the attention of the Department to a peculiar circumstance in the adoption of that resolution, tending to show that it was born of the same spirit, which for a long time confidently asserted that, in the eye of the German tariff laws and regulations, canned meat or peaches were fine "iron ware."

I shall endeavor to trace the resolution referred to to its real origin. It is clearly the policy of the Government, in these times of turbulent socialistic agitations, to form around itself a phalanx of loyal and conservative elements, by means of legislation, which will convince them that the Government is appreciative of their wants and anxious to foster and enhance their material welfare. As in all other European countries, except Great Britain, the rural population of Germany is not only the most numerous, but also the most conservative element and least inclined to adopt new political or social theories.

A paternal care exercised over the rural population, a proper ministration to their wants, therefore, must greatly strengthen the Government. Thus gradually a reliable majority in the Reichstag, the popular and most essential legislative factor of the empire, may be created, which will support and carry out reformatory plans and assist in keeping in check the turbulent socialistic elements of the great cities.

Now, the competition of the American hog raiser and pork packer was severely felt by the rural producer of Germany. The imposition of a duty of 12 marks per 100 kilograms did not deter the American shipper. According to the present composition and temper of the Reichstag, however, it was impossible to obtain a majority for a law either prohibiting, on some specious ground, the importation of American pork or so to increase the duty thereon as to make American competition impossible. But an expedient was soon found. The Bundesrath is not only one of the legislative factors of the German Imperial Government (and in that respect it somewhat resembles the Senate of the United States, while the Reichstag corresponds to the House of Representatives), but it also exercises executive authority and functions; in other words, its powers are not only legislative, but also supervisory, regulative, and executive. It is charged with the adoption and passage of suitable rules and regulations to carry into effect the laws of the empire.

The Bundesrath consists of fifty-eight members. These, in one view, represent the several sovereign states of the German Empire. They are not elected like the members of the Reichstag, but appointed by the several German governments. Of the 58 members Prussia appoints 17, Bavaria 6, Saxony and Wurtemberg 4 each, Baden and Hesse 3 each, Mecklenburg-Schwerin and Brunswick 2 each, and all other principalities, including the three Hanse Towns, Hamburg, Bremen, and Lubeck, 1 each. This body, so constituted and empowered, was requested by the imperial chancellor to enjoin, by virtue of its regulative power, the importation of American pork on the ground that it was affected by trichinæ, and therefore unwholesome.

Now, although this sweeping allegation was not supported by sufficient proof, and although numerous petitions and remonstrances against such a regulation were sent to the Government and to the Bundesrath from the manufacturing districts of Germany, where American pork and hams had become indispensable articles of nourishment, the Bundesrath unanimously passed the resolution referred to, the prohibition decreed to go into effect thirty days after its promulgation by the imperial chancellor.

It is likely that the point which readily suggests itself, viz, whether one branch of the Government can, upon an unproven assumption of facts, by a so-called "regulation," abrogate and annul a law duly enacted and in full force and effect, will be raised in the Reichstag when that body convenes in May next; but I doubt that the discussion of the question will have any practical result whatever.

The public journals now announce that the decree of the Bundesrath will be published in a few days, and that the regulation therefore will go into effect early in April, 1883.

The unanimity of the decision reached by the Bundesrath, however, has surprised even the friends of the measure. It was confidently believed that not only the Hanse Towns but also some other members of that body would vote against a proposition of such doubtful justice and utility. Subsequent developments, however, have shown how that unanimity was reached, and at the same time how little the Bundesrath itself believed in the correctness of the allegation, that the American pork was unwholesome.

To make this statement of mine clear it is only necessary to cite an article which appeared in the Cologne Gazette, a leading and influential journal of Germany, in its issue of the 26th of February, 1883, which article I attach to this report and of which the following is a correct translation, viz:

> On February 21 the Bundesrath decreed that thirty days after the promulgation of a regulation to that effect by the imperial chancellor the importation of American hogs and hog-meat shall be prohibited, this resolution having been adopted unanimously. It might create astonishment that the Hanse Towns have also given in their consent. But it must be observed that they have only reluctantly said, "*Si omnes consentiunt, ego non dissentio.*" They have declared that they have been unable to convince themselves of the utility or necessity of this measure, and that they have given in their consent only because sanitary considerations alone were urged as a reason for the measure, and they were unwilling to take the responsibility of being alone indifferent to the health of the German people. But as wise merchants they have at least averted the worst consequence to their carrying trade, inasmuch as they have obtained permission to import American hog-meat for re-exportation and to provision their own ships with American hog-meat. That seamen may eat trichinous meat with impunity we had not hitherto heard of. Or do the Hanse Town men not believe in the danger of trichinæ and the seriousness of the arguments in favor of the measure?
>
> As to the sanitary consideration, the prohibition of American hog-meat will undoubtedly prove very healthy for the purses of our estate owners, but very unhealthy for the poorer classes of our population.
>
> We will not to-day enter further into the subject, which to us is the most melancoly piece of our economical policy.

Comment on this article is unnecessary. It fitly characterizes the spirit of the measure referred to. I will only add in conclusion that the views expressed and implied in the article are shared by almost all those who have given the subject any attention.

FERDINAND VOGELER,
Consul-General.

FRANKFORT-ON-THE-MAIN, GERMANY, *March* 3, 1883.

THE CONSEQUENTIAL EFFECTS OF GERMAN PROHIBITION.

REPORT BY CONSUL RYDER, OF COPENHAGEN.

I have herewith the honor to report on a subject which is at present creating considerable excitement amongst the agricultural classes in this country. I allude to an imperial decree lately enacted by the German Empire, prohibiting the importation of live swine, pork, and sausages from the United States into the ports of the German Empire.

Fears seem to be entertained here that the very considerable export trade in these articles which is now carried on from this country with Germany may, at no very remote period and in consequence of this decree, be subjected to such regulations and restrictions as would materially interfere with this trade, and that for the important agricultural interest of this country it would be desirable that Denmark should also issue a similar prohibitory order against the importation of such stock from the United States. I do not, however, at present anticipate any immediate danger of such prohibitory order being enforced; but should the German Government later on deem it necessary to place onerous restrictions on the trade from this country, under the plea that American swine and pork were being introduced into the empire through this channel, great pressure would doubtless be brought to bear so as to compel the Danish Government to issue a similar decree of exclusion in the interests of their agricultural community.

In investigating the importance of this branch of Danish trade, it will be found that the export of live swine is mainly directed towards Germany. Inasmuch as whilst the total export in 1881 of hogs and pigs from this country amounted to 253,294 head, of the value of 22,400,000 kroners, of these no less than 237,118 head, of the value of 21,250,000 kroners, were exported to the German Empire. In the same year, 979,100 pounds of pork and hams, of the value of 396,000 kroners; and 946,000 pounds of beef and sausages, of the value of 269,000 kroners, were likewise exported to the same country, giving a total export value of these articles of about 21,900,000 kroners.

That a very considerable proportion of the live stock which is exported from Denmark to Hamburg is not intended for consumption in that empire, but is again re-exported in a slaughtered state to Holland and to England, is not to be denied; but looking at the development which this trade has received in the latter years, it is felt by the commercial and agricultural classes in this country that they cannot at present afford to lose the market of Hamburg as a middle link in this trade, and that even supposing that other markets could be found for the absorption of their surplus stocks of live swine, this would, in the first instance, at least, be attended with considerable pecuniary loss. At the same time, however, it may be presumed that Germany, especially at a time when its supplies from the United States are stopped, cannot well afford to be deprived also of its supplies from this country, and that consequently it may not place further restrictions on this trade than may be thought absolutely necessary for the preventing of American produce being clandestinely introduced into the empire through neighboring States. But if every shipment of swine or its products has to be accompanied by certificates and proofs of their origin, this will entail considerable expense, trouble, and loss of time.

Proceeding next to investigate the extent of the trade in these articles between the United States and this country, it will be seen that the importation of live swine, owing to the heavy expenses and risks attending the long sea voyage, may be classed as *nil*, whereas the trade in hog products has gradually been on the increase in the latter years, the importation of pork and hams in 1881 amounting to 4,175,000 pounds, of the value of 1,566,000 kroners, and of beef and sausages to 357,000 pounds, to the value of 98,000 kroners. It will thus be seen that a restriction simply confined to a prohibition of the importation of live swine would not have any injurious effects on the commercial relations between the United States and this country; and taking into consideration that the swine products are imported for home consumption and not for re-export, thus tending to the welfare of the general community by lessening the cost of living, I am of the opinion that these views will tend to outweigh with the Danish authorities any pressure that might be brought to bear upon them from the commercial agricultural interests for the furtherance of any such injurious restrictions.

The restrictive measure enacted by the German Empire, under the pretense of sanitary reasons, is but a flimsy veil which might easily be torn into shreds. It has more the appearance of a sop to satisfy the clamors of the agricultural classes, which have no doubt been suffering from the bad harvests in the last years; but fortunately, this class of the community in Denmark has from various circumstances certainly not been subjected to such unfavorable results as has been the case in most of the other European states, and consequently the Danish Government will be in better position to withstand similar pressure from this class of their community.

HENRY B. RYDER,
Consul.

UNITED STATES CONSULATE,
Copenhagen, April 5, 1883.

CANADIAN TARIFF CHANGES.

REPORT BY COMMERCIAL AGENT CARROLL, OF PORT STANLEY AND ST. THOMAS

I have the honor to transmit herein, for the information of the Department, an exhibit of the changes in the Canadian tariff, promulgated on the 30th ultimo, which I take from the Toronto Mail of the 31st ultimo.

In this connection it may be proper to state that I have compared the changes adverted to with other lists, and find them to be correct.

PHILIP CARROLL,
Commercial Agent.

COMMERCIAL AGENCY OF THE UNITED STATES,
Port Stanley and St. Thomas, Canada, April 2, 1883.

[From the Toronto Mail of March 31, 1883.]

CHANGES IN TARIFF.

LIST OF INCREASES AND DECREASES—CONSIDERABLE ADDITIONS TO FREE LIST—INCREASE OF PROTECTIVE DUTIES ON MANUFACTURED GOODS.

OTTAWA, *March* 30.

The following are the changes in the tariff:

Agates (free). *Add* rubies, pearls, sapphires, emeralds, garnets, opals, not polished, &c.

Aniline dyes (free). *Add* in bulk or packages, five pounds or over.

Celuloid in sheets (made free last year). *Add* lumps or blocks.

Colors (free). *Add* dry metallic oxide.

Drills for prospecting for minerals.

Dye, jet black.

Hatters' plush of silk or cotton.

Kainite or German potash.

Salts for fertilizers.

Lumber or timber, unmanufactured (free). *Add* greenwood and sawdust, and hickory sawn to shape for spokes for wheels, not further manufactured.

Mineral waters, natural.

Settlers' effects (free). *Add* musical instruments, sewing machines, live stock, carts, and other vehicles one year in use.

Add to the free list:

Asphaltum, books bound, printed over seven years, or printed by any Government or scientific association not for trade; manuscripts, chronometers, compasses for ships, copper in sheets, iron and steel, old and scrap; iron beams, sheets or plates, and knees for iron or composite ships; iodine; crude marble in blocks, 15 cubic feet and over; otto of roses; platinum wire; seeds, anise, coriander, fennel, and fenugreek; spurs and stilts for earthenware makers; sausage skins or casings, not cleaned; valerian root; wire of brass or copper; round or flat wire of iron or steel, galvanized or tinned, or not 15 gauge and smaller; street railway bars or rails; fish-plates and in sheets for manufacture of screws.

On the following articles there has been a decrease, and the rate is as follows:

Buckram, 10 per cent.

Button-covers, 10 per cent.

Coal dust, 20 per cent. ad valorem.

Fruit, dried, 20 per cent.

Lamp-black and ivory black, 10 per cent.

Lead, nitrate and acetate of, 5 per cent.

Leather, lamb, sheep, buck, deer, elk, and antelope, dressed, and colored or not, 10 per cent.

Kid, tanned or dressed, and colored or not, 15 per cent.

Liquorice paste, not given.

Marble, in blocks, 15 cubic feet and over, free; same, under 15 cubic feet, 10 per cent.

Slabs, sawn on two sides, 10 per cent.

Oil or enameled cloth, for trunk and valise makers, 15 per cent.

Paper union collar cloth, 5 per cent.

Precious stones, agates, emeralds, garnets, and opals, polished, 10 per cent.

Spices (except nutmeg and mace) unground, 10 per cent.

Tobacco and snuff, specific duty of 20 per pound [per cent. ?].

Turpentine, spirits of, 10 per cent.

Bells, except for churches, 30 per cent., now dutiable according to material.

Cloth, of other materials than cotton or woolen, made uniform, 30 per cent.

Ether, sulphuric and nitric, 30 per cent.

India rubber clothing, made waterproof, 35 per cent.

Jellies and jams, 6 cents per pound, specific.

Magic lanterns and optical instruments, to be 25 per cent.; nickel anodes, 10 per cent.

Pocket books and purses added to trunks, valises, &c., 30 per cent. ad valorem.

Vaseline, and similar preparations of petroleum, in bulk, 5 cents in bottle, or 6 cents per pound.

Woolen hosiery, same as woolen clothing, 10 cents per pound, and 25 per cent. ad valorem.

Dress and costume cloths, under 25 wide, and weighing not more than 3 ounces per square yard, 20 per cent.

Yarns of wool or worsted, 2-ply or more, different colors combined, or mohair yarns, white, or any color, imported by manufacturers, 20 per cent.

On the following articles the duty has been increased:

Acids, acetic, 15 per cent. per gallon; other acids, 25 per cent.

Absinthe, $2 per gallon; aniline dyes less than 5 pound packages, 10 per cent.

Agricultural implements and machines to pay specific and ad valorem equal to 35 per cent.; portable machines, spades, hoes, forks, the same.

Bed comforters and quilts, 27½ per cent.

Boot and shoe laces, 30 per cent.

Braces and suspenders, 30 per cent.

Cards (playing), 6 cents per pack.

Carriages to pay specific and ad valorem equal to 35 per cent.

Carriages (children's), same as above.

Cordage of all kinds, 20 per cent.

Cotton, printed or dyed, 27½ per cent. on 1st January, 1884.

Cases, jewel, watch, and similar cases, 30 per cent.

Cane or rattan, split, 25 per cent.

Drain and sewer pipes, glazed, 25 per cent.

Fruit in air-tight cans, 3 cents, 1 pound cans and less, and so in proportion for large cans.

Furniture, iron bedsteads included, and charged 35 per cent., and show-cases to be charged $2 each specific and 35 per cent.

Hair-cloth, 30 per cent.

Carpeting, matting, or mats, 25 per cent. ad valorem.

Lamp-wicks, 30 per cent.

Music, printed, 10 per cent. per pound.

Paper, wall and fancy papers, 30 per cent.

Pumps, 50 cents each specific, to be added to present 25 per cent. ad valorem.

Steel, in ingots, bars, sheets, coils, to pay $5 per ton on and after 1st July next.

Files, specific, under 9 inches in length, 5 cents; 9 inches, and over, 3 cents per pound.

Tin crystals, 20 per cent.

Vinegar, 15 cents imperial gallon.

Vegetables, tomatoes, and others, including corn in cans, 2 cents per can of 1 pound or less, and so in proportion for larger cans.

Prohibition of the export of deer, wild turkeys, and quail.

Bounty on pig iron, $1.50 per ton, 3 years; $1 per ton 3 years more.

EXCISE DUTY.

On and after May 1, 1883, tobacco and snuffs to pay 12 cents per pound on foreign leaf, and 2 cents per pound on Canadian; all packages cigarettes or cut tobacco of less weight than one-twentieth of a pound, 20 cents per pound; cigars, until July 1, 30 cents per pound, foreign leaf, 15 cents per pound if made from Canadian leaf; on and after July 1, on cigars, foreign leaf, $3 per thousand, Canadian leaf, $1.50 per thousand.

HOW CANADA IS GOVERNED.

REPORT BY COMMERCIAL AGENT CARROLL, OF PORT STANLEY AND ST. THOMAS.

As is well known, there are seven provinces in the Dominion, viz: New Brunswick, Nova Scotia, Prince Edward Island, Quebec, Ontario, British Columbia, and Manitoba. The total population of these provinces is 4,352,080. The executive authority is vested in the Queen, exercised through the Governor-General, who receives $50,000 per year as salary.

The Governor-General has thirteen advisers, known as the Cabinet or "Queen's Privy Council of Canada," each of whom receives a salary of $7,000 per annum and $1,000 in addition for each session of Parliament, excepting the Premier, who receives $8,000 and an additional $1,000 per session, making the total annual salaries of these officers $155,000, $49,000 in excess of that paid to the President of the United States and his Cabinet.

A member of the Canadian Cabinet must be either a Senator or a Member of the House of Commons.

There are twelve departments, viz: (1) of Justice; (2) of Finance; (3) of Agriculture; (4) of the Secretary of State; (5) of Militia and Defense; (6) of Customs; (7) of Inland Revenue; (8) of the Interior; (9) of Public Works; (10) of Railways and Canals; (11) of the Post-Office; and (12) the Department of Marine and Fisheries.

The chiefs of these departments are to be addressed, for instance, thus: "The honorable Minister of Justice, Ottawa, Canada;" or, as the case may.

Parliament is composed of a Senate and House of Commons.

Senators are appointed for life, and members of the House of Commons are elected for five years.

At present there can be but seventy eight Senators, and after the admission of Newfoundland into the Confederation the number is limited to eighty-two.

In the late Parliament there were two hundred and six members in the House of Commons. Under the recent apportionment the House just elected will have two hundred and eleven members.

Each Senator and member of the House of Commons receives $1,000 per annum as compensation.

The sessions of Parliament are short compared with those of the Congress of the United States. There is no particular time or day for the assembling of Parliament. It usually meets, however, in February of each year, being summoned to Ottawa by proclamation of the Governor-General, who also, with the advice of the Cabinet, prorogues it, and, so far as the House of Commons is concerned, dissolves Parliament at the end of five years or sooner.

Parliament is opened in person by the Governor-General with considerable formality and pomp.

The speaker of the Senate, who must be a Senator, is appointed by the Governor-General. He has in all cases a vote. Senators do not address the Speaker. They address the Senate. Intemperate or offensive language is dealt with by the Senate. The members do not vote "yea" and "nay." Those in favor of a motion are the "contents," and those opposed are the "non contents."

In the House of Commons the members address the Speaker, who is elected by that body.

The Speaker of the Senate takes part in the debates thereof. The Speaker of the House of Commons takes no part in the debates. He has the casting vote in case of a tie. Unlike the Speaker of the Senate, he preserves order, and, on the whole, wields about the same power as the Speaker of the House of Representatives of the United States.

The form of government, to a great extent, is modeled from our own, or to that extent which its relation to Great Britain permits.

The Governor-General has certain powers, but he appears to have no will against that of the Government. He therefore seldom uses any of his prerogatives, but assents to such measures as the Government may see fit to present.

Each province has a local legislature, in some of which there are an upper and lower house, and in others one house.

A lieutenant-governor, appointed by the Governor-General, presides over each province.

With the exception of members of the House of Commons and of the local legislature, all officers are appointed, and hold their positions during life or good behavior.

Only certain office-holders are allowed to vote.

General election days appear like Sunday. All places selling intoxicating drinks are closed. The law on this subject is very stringent Any person violating it is fined heavily and jailed.

Any person who has attained the age of twenty-one years, and has an income of $400 in a city, $300 in a town, $200 in a village, and $200 in a township may vote, provided he is a British subject. Any person, meaning a male, owning property in one or more election districts, can vote in each district in which his property is located, provided it amounts to the figure in either of the places named above. The voting is by ballot, and only one voter is allowed in the poll at a time. The returning officer is supposed to have the tickets printed with the names of the opposing candidates thereon, who supplies each of his deputies with the number required at their respective polls on the morning of election.

The tickets are numbered by the deputy returning officer, who, as each voter presents himself, initials the ticket, hands it to the voter, who proceeds to another apartment, affixes the mark required by law opposite the name of the candidate of his choice, returns to the poll, hands the ticket to the returning officer, who examines it on the outside to see that his initials are there, places it in the box, and the process is complete. The candidate has nothing to do with the tickets or their preparation. Indeed, it is unlawful that he should.

Each candidate must deposit $200 with the proper authority before he can be recognized as such. This sum is returned in each case should the defeated candidate receive more than one-half of all the votes polled. If not, only the successful candidate's deposit is returned.

Constituencies are small in Canada compared with the United States, and majorities are frequently as low as one, two, or three. Two or three hundred is considered a large majority in most electoral districts.

In this connection, and in conclusion, it may be proper to add that the province of Quebec is the pivotal province as to representation in the Dominion House of Commons. It has a fixed representation of sixty-five members, and the representation of the other provinces is in proportion to the number of their respective populations as the number sixty-five bears to the population of Quebec. This is determined and adjusted decennially.

PHILIP CARROLL,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Port Stanley and St. Thomas, Canada.

NEW ZEALAND MEAT EXPORT.

REPORT BY CONSUL GRIFFIN OF AUCKLAND.

The export of frozen meat from New Zealand is altogether a new industry, but it is one that bids fair to swell to very large proportions in the near future. The first experiment ever tried in this colony was in the month of February, by the New Zealand Land Company. The directors of this company, stimulated by the success attending the export of fresh meat from the United States and the Australian colonies to Great Britain, chartered a ship (the Dunedin) of about 1,250 tons, and in a short time put it in order with the necessary apparatus to receive the frozen meat. The ship had space for 450 tons of meat; 5,000 crossbred sheep were killed for the purpose, with "the bloom on"—that is, were slaughtered near the run—so as to avoid the ill effects of being driven any distance. The sheep were frozen and packed in bags so as to preserve their shape, and then carefully stowed away.

The vessel sailed from Dunedin on the 18th of February, 1882, and arrived at Liverpool on the 24th May, after a voyage of ninety-eight days. The mutton was landed in excellent condition and was readily sold at 7½*d.* (15 cents) per pound. The superior flavor of the meat and the extraordinary weight of the carcasses attracted such general attention that the London Times devoted two or three leading editorial articles upon the subject. It said, among other things:

> That this triumph over physical difficulties was almost incredible. It is the product of a very large grazing property, extending over a half dozen parishes, brought from the antipodes and discharged into our dead-meat market in a day.

The success of the enterprise was not only remarkable from the fact that it was the first shipment of fresh meat from New Zealand, but it was the first shipment from any of the Australian colonies in a sailing vessel.

It is believed, however, that meat can be carried much cheaper by steam than by sailing vessels. The voyage of the latter occupies twice the time of the former; moreover, sailing vessels have to be provided with special and uneconomical engine power. Still for some time to come New Zealand shippers will be mainly dependent upon sailing vessels.

The New Zealand Shipping Company have nearly all their splendid steamers in readiness for the shipment of meat. The first steamer, the

British King, will sail from Lyttleton in the latter part of this month with 10,000 carcasses, weighing from 60 to 100 pounds each. The cost of freight by this company is 2*d.* (4 cents) per pound, and the charge for freezing is ½d (1 cent) per pound. Other steamers of this line are advertised to sail as follows: The Penstanton, 2,400 tons, from Port Chalmers in April; the British Queen, 3,558 tons, from Lyttleton in May; the Ionic, 4,368 tons, in June, and the Doric, 4,369 tons, in July. All these steamers will take full cargoes of beef and mutton. They are strong built vessels and have sufficient speed to make the passage to London, via the Straits of Magellan, in about forty-five days. This company has also fitted up the two fine sailing vessels, the Opawa and the Mataura. The former is loading at Christchurch and the latter at Auckland.

That enterprising shipping firm, the Shaw, Saville & Albion Company, have ordered to be built by W. Bentley & Co., on the Clyde, three large steamers, each of 5,000 tons burden, for the New Zealand trade. They are to be fitted up in the best style and with refrigerators for carrying meat in large quantities. This company has also chartered a number of sailing vessels for the same trade. The Lady Jocelyn will shortly sail from Wellington and the Sorento from Port Chalmers with cargoes of meat.

The beef and mutton now being put aboard the Mataura, at Auckland, is the best that can be procured in the market. The machine employed for freezing is one of Harlam's patent dry-air refrigerators. The process by which the meat is frozen is as follows: Immediately after the sheep or oxen are killed they are at once conveyed on board and hung in the meat-room, the space of which is about 21,000 cubic feet, capable of taking in between 5,000 and 6,000 carcasses of sheep. The freezing apparatus is at once put in motion. It is driven by an engine of 80 horse-power. The machine is capable of delivering 40,000 cubic feet of dry air per hour, at a temperature of 60° to 80° below zero. Only 2 tons of coal are required to keep the machine going for the full twenty-four hours. In cold latitudes it is not found necessary to use the machine for more than four to six hours per day. The hottest sun that ever shone down from a tropical sky would still leave the meat-room cold as the air of a hard frosty day in the severest winter of England.

Sir Dillon Bell, the agent of the New Zealand Government at London, is fully satisfied that mutton from this colony can be placed in the London market at 6*d.* (12 cents) per pound, and leave a good profit both for the grower and the shipper. He estimates the meat supply of the Australian colonies at 700,000 tons per annum, or 2,000 tons per day. But the real limit of the supplying power of the colonies is the amount of tonnage that they can command; and as meat can form only a portion of the cargoes of steamers or sailing vessels, and these vessels must secure inward as well as outward freights in order to pay, there is not much prospect of even a fourth of this quantity being reached for many years to come. At an average of 350 tons per vessel, equal to three times that tonnage in bulk, including machinery and coal, it would take about three hundred large vessels annually to carry 100,000 tons.

The meat trade in the future, at least as far as Australasia is concerned, will, I think, be from New Zealand. The high price of meat in Victoria and New South Wales is said to be exceptional, on account of the drought. Indeed, the long drought there was given as a reason for the losses of the Australian Frozen Meat Company during the year 1882. The directors of that company in their half-yearly report admitted a loss of £3,080.

It is more than probable that the colonial exporters will soon find the English process of freezing meat to be a very expensive one, and eventually they will be compelled to adopt the Eastman or some other American process. In the Eastman process the machinery is very compact, and, besides, there is not that continuous spray from the wood pipe through which the air enters the freezing chamber in the English machine, resembling a miniature snow-storm, and which has to be cleaned out every few minutes.

The American process consists of a freezing chamber with double walls, between which is a current of air and a supply of asbestus, hair, cloth, mineral, wool, or other non-conductors. Above the room is a reservoir of ice or other cooling agents, with an adjacent pump. Cylinders are placed at suitable intervals in the chamber. From the reservoir a pipe runs to the nearest cylinder and enters it at the bottom; another pipe runs from the top of this cylinder to near the bottom of the next, and so on throughout the series; a return pipe connects the last cylinder with the reservoir. The cooling liquid follows the course indicated. From the reservoir it is thrown by gravitation into the first cylinder, displacing the warmer liquid therein and forcing it up and over into the bottom of the next cylinder, and so on to the last, whence the pump lifts the warmer liquid back into the ice reservoir. The cylinders being air-tight, there is no contact with the cooling liquid and the atmosphere in the freezing chamber, which may be kept at any temperature.

The demand for fresh meat in England is becoming greater every day. The annual supply of sheep alone in Britain has been reduced within the last few years from 40,000,000 to 28,000,000, and the food supply of Ireland is so meager as to appear startling. The falling off in the number of cattle in the British isles is extraordinary; nor can I see any sign of improvement in this state of affairs. The colonies, of course, will be able to supply Great Britain with no inconsiderable amount of meat and grain, but that country will be dependent on the United States for the bulk of her food supply.

The United States ships annually to England vast numbers of live cattle. She also sends to the same country about 20,000 carcasses of beef every week, besides vast quantities of pork, bacon, and hams. The truth is, the resources of the United States for meat production are practically unlimited. Texas alone has over 6,000,000 cattle, to say nothing of the millions of acres of land in Colorado, Wyoming, New Mexico, and Montana so wonderfully adapted for the growth of grain, cattle, or sheep. The export of frozen meat from the colony of New Zealand during the year 1882 amounted to 15,244 cwt., valued at $96,995. This year the export will be very much larger. The average wholesale price of beef and mutton in New Zealand is about 2¾*d.* (5½ cents) per pound.

THE CANNED-MEAT TRADE.

Until last year there has been a marked falling off in the quantity and value of the exports of canned meat from New Zealand. During the year 1878 the total value of the exports of New Zealand preserved meat amounted to $372,225. In 1881 the amount declined to $111,950. Last year the amount increased to $222,660. The subjoined table shows the quantity and value of preserved meat exported from New Zealand since 1878:

A table showing the quantity and value of potted and preserved meats exported from the colony of New Zealand for each year from 1878 *to* 1882 *inclusive.*

Year.	Quantity.	Value.
	Cwt.	
1878	28,290	$372,225
1879	20,814	273,860
1880	15,296	192,550
1881	9,595	111,951
1882	21,316	222,660

The New Zealand Government has for some time past taken much pains to collect information in regard to the various methods pursued in the United States for canning and compressing meat for the British market, the kind of machinery used, the cost of constructing and running the same, the extent of the industry, &c. Upon inquiry it was found that one London firm alone, during a period of eleven months, imported 594,000 cases of canned meat from the United States, amounting in value to about $5,000,000. The firm stated that the 2-pound tins of American compressed meat sold readily in the London market at 6½*d.* (13 cents) per pound; 6-pound tins, 6*d.* (12 cents) per pound; 14-pound tins 5¾*d.* (11½ cents) per pound. The same firm also gave information respecting the sizes of tins the most suitable to be used. They found the following sizes the best: 2-pound tins packed in cases of 24 each; 4-pound, of 12 each; 6-pound, of 12 each; 14-pound, of 6 each; the principal demand being for the 2-pound and 14-pound tins. In every thousand cases the proportion of the sizes should be about 300 cases 2-pound tins, 25 cases 4-pound tins, 125 cases 6-pound tins, and 550 cases 14-pound tins. The tins are recommended to be lacquered, and not painted, and handsomely labeled. The estimated cost of a plant capable of turning out 5,000 tins a day is put down at $2,750. To this would have to be added freight, commissions, &c., in shipping it from New York to New Zealand.

The inquiries of the New Zealand Government have led the people of the colony to believe that they can, with the help of skilled labor and machinery from the United States, compete successfully with the American meat trade in the London market. Several wealthy firms in Auckland and Dunedin are so impressed with this idea that they have already ordered from New York the necessary plant for conducting the meat-canning industry on a large scale. The low price and superior quality of the New Zealand beef and mutton are certainly very favorable to the success of the enterprise, but the future alone can determine whether these advantages are sufficient to counterbalance those enjoyed by the various meat-canning establishments in the United States.

During a recent visit to Chicago I was fortunate enough to see Mr. Philip D. Armour, who is at the head of the largest packing concern in the world. I learned from him that the principal reason why Chicago can compete successfully with New Zealand in the meat trade is that Chicago canners can dispose at home of all the meat which is not canned. They have extensive distributive facilities, sending these cuts all over the country in refrigerators, thus competing with retail butchers. The hides and tallow also fetch fancy prices as compared with what they bring in New Zealand. The cattle blood is dried and sold at high prices for fertilizing purposes; and the horns and hoofs are taken by the glue and comb manufacturers. In fact, no part of the animal is lost. Owing to all this, the cost of what is put into the cans is reduced to a mere nominal price. In this way the Chicago canners are enabled to compete successfully with colonial beef.

The carcass trade—a new departure this season—is destined to futher reduce the cost of the canned product. Messrs. Armour & Co. have commenced shipping fresh beef to Eastern cities in refrigerator cars, and found it a successful undertaking. Thus a wider market is afforded for the best cuts and an increase in the capacity of the establishment is rendered necessary, both of which circumstances are calculated to reduce the cost of the meat reserved for the canning process. In Messrs. Armour & Co.'s house the opinion was expressed that the canning business of the future can only be carried on as an adjunct to the regular packing business, the sharp competition between canners and the high price of cattle being the reasons for his conclusion.

Messrs. Armour & Co. have killed 100,000 cattle a year for the past two years. The fall is the busiest season. The slaughter averages about 700 head a day, and ran up to 1,000 head one day, which is the largest number ever handled at the establishment in the time given. About 500 hands are employed in the canning establishment. Of this number 100 are girls engaged in lacquering and labeling cans. Mr. Armour expressed the opinion that the business of slaughtering would be done principally in the West. He said, "It is simply a law of nature that the bullock, like the hog, will be handled near the corn belt. In the East they have not the facilities for killing bullocks that we have."

Armour & Co., by means of their refrigerating establishments, are enabled to kill cattle all the year round. Experience has shown that beef slaughtered by them can be kept perfectly sound and good for several months.

It is reasonable to believe that similar establishments to those of Armour & Co. will at no distant day be started in the vicinity of the great mountain ranges of Montana and New Mexico. Figures furnished by the Hon. J. R. Dodge, statistician at Washington, give the number of beef-cattle annually slaughtered in the United States at 6,250,000 head, weighing 3,125,000,000 pounds. The receipts at the stock-yards of Chicago alone in one year were 1,498,550 head, exclusive of calves. As many as 11,163 were slaughtered in a single day.

Some disappointment is felt in London at the result of the shipments of meat from Australia for the year 1882, although the shipments rose from 565 tons to 1,700 tons, showing an increase of 1,135 tons over the year 1881. Still, from the preparations made, a much greater increase than that was expected. In the month of October, 1882, the shipments were unusually large, but there was a great falling off in the last two months of the year.

The prospects of the meat trade of Australasia for this year is, as I have said previously, much brighter in New Zealand than in any of the other colonies. The New Zealand meat is not only lower in price but of a much better quality and flavor. During the year 1882 there were forty meat-preserving factories in operation in New Zealand, four in the province of Auckland, three in Taraniki, nine in Wellington, five at Hawkes Bay, seven in Canterbury, nine in Marlborough, and three in Otago. The number of hands employed in these factories was 468. The total value of the ground and buildings of these establishments was $312,625, and the cost of the machinery or plant of the same was $171,600. The total output of all the factories was 892,791 pounds, and the number of cans was 205,204. The meat put up at these establishments is not so salable as that from the United States. The tins used are indifferently executed and are much heavier than the American ones. None of these establishments use conical shaped cans like those manufactured in Saint Louis and Chicago, and which are so popular in the European markets. Some of the factories, however, are making preparations to do much better work in the future than they have done in the past. A leading Auckland firm has in course of erection at their spacious buildings on Queen street a meat-canning plant capable of turning out 6,000 pounds of compressed beef per day. When finished this firm will have the most complete establishment of the kind in the southern hemisphere.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, N. Z., March 20, 1883.

EXPORTS FROM THE RIVER PLATE TO THE UNITED STATES.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

In a report made to the Department of State, dated February 23, 1881, I gave the exports to the United States from the River Plate, *i. e.*, all that part of South America, including Paraguay, Uraguay, and the Argentine Republic, drained by the Rio de la Plata for the year 1880.* In a subsequent report, dated February 28, 1882, I gave a similar statement for the year 1881.† I now give a table of the shipments from the River Plate for the year ending December 31, 1882. As heretofore, it has been compiled from official returns of exports declared at the consulates of Montevideo, Paysandu, Rosario, and Buenos Ayres, for the first three of which I am indebted to the courtesy of the United States consular officers at those places respectively. The table shows the amount and value of each article at the port of shipment:

Shipments from the River Plate to the United States for the year 1882.

REPUBLIC OF URAGUAY.

Articles.	Montevideo.		Paysandu.	
	Quantity.	Value.	Quantity.	Value.
Dry ox and cow hides ....number..	701, 967	$3, 014, 348 28	3, 718	$22, 469 71
Salted ox and cow hides ....do ...	34, 968	206, 834 00	....	....
Horse hair ....bales..	512	151, 453 23	....	....
Goat skins ....do ...	15	5, 592 53	....	....
Nutria skins ....do ...	4	1, 809 45	....	....
Kip skins ....do ...	2	350 00	....	....
Feathers ....cases..	18	8, 266 29	....	....
Carpincho skins ....number..	....	....	....	....
Wool ....bales..	7, 406	1, 229, 006 18	....	....
Deer and stag skins ....do ...	2	470 00	....	....
Hide cuttings ....do ...	524	15, 660 08	....	....
Artificial guano ....tons..	....	....	71¼	2, 129 37
Old iron ....do...	....	....	....	....

---

* Published in No. 8 of Commercial Reports, page 839.
† Published in No. 19 of Commercial Reports, page 13.

Shipments from the River Plate to the United States for the year 1882—Continued.

REPUBLIC OF URAGUAY—Continued.

Articles.	Montevideo.		Paysandu.	
	Quantity.	Value.	Quantity.	Value.
Horse hides....number..	....	....	....	....
Calf skins....bales..	11	$1,154 80	....	....
Chinchilla skins.... do ...	1	516 04	....	....
Rags and paper stock....bags..	....	....	....	....
Horns....number..	14,960	1,584 45	....	....
Horn piths....tons..	122	2,273 80	....	....
Bones and bone-ash....do...	5,112¾	106,675 68	4,036	$93,508 94
Shin bones....number..	104,448	1,350 83	....	....
Dried blood....tons..	364	1,014 40	....	....
Fish tails....bags..	10	424 70	....	....
Animal black....do ...	....	....	....	....
Sundries....pkgs..	55	4,840 82	....	....
Total....	....	4,753,925 56	....	118,166 02

ARGENTINE REPUBLIC.

Articles.	Rosario.		Buenos Ayres.	
	Quantity.	Value.	Quantity.	Value.
Dry ox and cow hides....number..	152,003	$569,377 19	535,183	$2,398,572 59
Salted ox and cow hides....do ...	....	....	28,055	187,564 27
Horse hair....bales..	898	198,169 66	1,230	313,070 95
Goat skins....do ..	767	339,455 03	261	113,765 53
Nutria skins....do ..	7	2,792 13	302	146,951 11
Kip skins.... do ...	....	....	....	....
Feathers....cases..	....	....	153	61,708 11
Carpincho skins....number..	....	....	25,708	28,705 91
Wool....bales..	8,798	1,071,268 30	875	89,355 01
Deer and stag skins.... do ...	....	....	13,357	16,910 61
Do....bundles..	....	....	7	
Hide cuttings.... do ...	257	5,916 93	396	18,694 47
Artificial guano....tons..	....	....	....	15,566 55
Old iron.... do...	16	238 41	795½	15,566 55
Horse hides....number..	....	....	2,635	1,063 40
Calf skins....bales..	....	....	....	....
Chinchilla skins....do ...	....	....	....	....
Rag and paper stock....bags..	....	....	23	579 49
Horns....number..	....	....	86,666	8.021 78
Horn piths....tons..	....	....	17,105	
Bones and bone-ash.... do ..	1,811½	45,436 64	4,133	90,837 25
Shin bones....number..	....	....	....	....
Dried blood....bags..	....	....	13,133	42,411 61
Fish tails.... do ...	....	....	....	....
Animal black....do ...	....	....	4,587	9,487 59
Sundries....pkgs..	3	395 08	15	2,397 16
Total....	....	2,233,049 37	....	3,540,042 94

The total shipments to the United States from the River Plate for 1880 amounted to $11,451,060.69, of which $5,456,891.62 went from Uruguay and $5,994,169.07 from the Argentine Republic.

The total shipments to the United States from the River Plate for 1881 amounted to $11,981,061.88, of which $6,054,368.37 went from Uruguay and $5,926,693.51 from the Argentine Republic. And it will be seen from the foregoing and following tables that the total shipments to the United States from the River Plate for the year 1882 amounted to $10,645,125.89, being $799,934.80 less than in 1880, and $1,329,935.99 less than in 1881.

For the purpose of further comparison I subjoin the following table, showing the total shipments from the River Plate for the years 1881 and and 1882 respectively:

Total shipments from the River Plate to the United States for 1881 *and* 1882.

Articles.	1881.		1882.	
	Quantity.	Value.	Quantity.	Value.
Dry ox and cow hides.................number..	2,075,087	$7,306,649 89	1,392,871	$6,004,767 77
Salted ox and cow hides................do....	87,787	496,634 40	63,023	394,398 27
Horse hair ....bales..	2,116	459,691 30	2,640	662,693 84
Goat skins ....do....	1,422	573,876 81	1,043	388,813 09
Nutria skins ....do....	618	189,941 76	313	151,552 69
Kip skins ....do....	....	....	2	350 00
Feathers ....cases .	210	103,510 26	171	69,974 40
Carpincho skins...........................bales..	4	44,240 08	....	....
Do ....number..	35,800		25,708	28,705 91
Wool ....bales..	15,083	2,197,967 60	17,179	2,389,629 49
Deer and stag skins.......................do....	20	20,151 36	9	17,380 61
Do ....number..	5,819		13,357	
Sheep skins ....bales..	13	15,051 67	....	....
Hide cuttings ....do....	1,216	41,298 51	1,177	34,671 03
Artificial guano ....tons..	....	....	71⅕	2,129 37
Old iron ....do....	1,407⅐	21,178 21	2,202 9/14	15,804 96
Horse hides................................number..	6,456	8,816 10	2,635	1,063 40
Calf skins ....bales..	174	25,394 20	11	1,454 80
Chinchilla skins.............................do....	7	4,206 56	1	516 04
Bird skins..................................cases..	17	475 44	....	....
Rags and paper stock..................bags..	33	688 08	23	579 49
Horns ....number..	121,685	7,963 50	118,731	11,880 03
Horn piths ....tons..	100	2,193 98	122	
Bones and bone-ash.....................do....	21,491⅘	447,443 04	15,122 9/10	336,458 51
Shin bones ....number..	....	....	104,448	1,350 83
Dried blood..................................bags..	1,621	4,927 04	13,497	43,426 01
Fish tails.......................................do....	15	1,044 89	10	424 70
Animal blood.................................do....	....	....	4,587	9,487 59
Sundries..	....	7,736 20	....	7,633 06
Total	....	11,981,061 88	....	10,645,125 89

This decided falling off in the volume of exports is accounted for in the general stagnation which has characterized the export trade to the United States, the prices here corresponding so nearly to those in American markets as to leave no margin for profits. In regard to the exports from each port for the last year, it appears:

1. That from Montevideo, while there was an increase of 2,553 bales of wool there was a decrease of 557,376 in the number of hides, and a general decrease in almost every other article of shipment, the total decrease in value being $1,091,216.57.
2. That from the port of Paysandu the decrease in the shipments of bone and bone-ash 6,425 tons, and in the total value of the shipments of $91,218.22.
3. That from Rosario, while there has been a slight falling off in the shipments of wool, there has been an increase of 90,000 in the number of hides, and a total increase in the value of shipments of $219,161.53.
4. That from Buenos Ayres there has been a falling off of 218,915 in the number of dry hides, and a general falling off in almost all other articles of export, the total decrease for the year being $372,762.73.

There is nothing new to report in reference to the export trade of the Argentine Republic with the United States. No unusual features, except unusual stagnation, have presented themselves during the last year.

The announcement, however, that there has been a slight reduction in our tariff of duties on wool has caused some little animation in business circles; and it is thought, even if the finer grades must be still excluded from our market, that there will be an easier feeling in regard to the Cordoba or carpet wools, and that this will lead to increased shipments of this class during the present year.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, March 21, 1883.

EXPORTS OF SWISS SILK RIBBONS TO THE UNITED STATE

REPORT BY CONSUL MASON, OF BASLE.

The total exports of silk and mixed ribbons from the consular district of Basle to the United States during the first four months of 188[illegible] nd 1883, respectively, were as follows:

Months.	1882.	1883.
	Francs.	*Francs.*
January	1, 478, 573	1, 695, 963
February	1, 354, 928	807, 636
March	910, 956	626, 742
April	650, 778	626, 782
Total	4, 395, 235	3, 757, 123
Decrease	....	638, 112

The event has thus far fulfilled very exactly the prediction made in these reports on the 10th of February last, that although the trade of 1883 opened with great vigor, the exports of January exceeding those of any one month since 1872, there would be a marked decline toward the close of the quarter, and the aggregate of the year would be probably less than that of 1882.

The reason for this decline in ribbon exports during March and April are sufficiently obvious.

First of all, the heavy importations of last autumn, and of December and January, exceeded the immediate demands of the American market and left a somewhat unwieldy surplus in the hands of the importers.

Still more important and influential was the fact that by a sudden and arbitrary decree of fashion, "fancy" ribbons, that is to say, ribbons in patterns with different colors and tints, became undesirable. The *mode* demanded plain ribbons, velvets, satins, failles, and particularly the variety of ribbed goods known in the trade as "Ottomans," and almost nothing else could be sold except at heavy sacrifices. The beautiful and elaborate products of the Jacquard looms in Basle and St. Etienne, which a season before had been in such demand, were sold in many cases by the American consignees for prices that hardly more than covered the duties which had been paid on them.

To make the matter still worse for the European manufacturers, the fickle decree of fashion turned almost wholly in favor of ribbons of narrow width, those from 2 to 28 lines being most desirable. Wide goods (ribbons 28 to 48 lines) became a drug, and the rich and costly sash patterns, from 52 to 120 lines, which had formed so substantial a staple in the trade of the previous two years, were no longer in demand at any profit whatever.

The fact was again clearly demonstrated that the United States make their own fashions in respect to ribbons, and that the character of this demand cannot be accurately predicted from indications based upon the *mode* of Paris or London.

Basle is now thronged with buyers from England and the United States, placing orders for goods designed for the autumn trade. The English buyers have made within the past fortnight heavy contracts, the burning of a large silk warehouse in London last winter and the destruction of an immense stock of ribbons having created a deficit in the stock which it will require large quantities of new goods to fill. The American buyers stipulate for deliveries in July and August, and as the German demand meanwhile continues steady and strong for all classes of plain ribbons, the Basle manufacturers are already equipped with contracts which will enlist their exertions until past midsummer.

The goods ordered for the United States are intended for entry after the 1st of July, under the revised tariff, which will assess a duty of 50 per cent. upon silks instead of 60 per cent. as levied by the present tariff. As the new tariff imposes a uniform duty upon all classes of silk ribbons, instead of making a difference of 10 per cent. between all silk patterns and those containing a specified proportion of cotton, it may fairly be assumed that the effect of this change will be to stimulate the importation of all silk qualities and reduce that of the inferior grades.

THE REIGNING STYLES.

There has rarely been a spring season in which the manufacturers have been so long puzzled to predict with certainty the character of the American demand for the coming autumn and winter trade. Until the middle of April the only certain indication was that no fancy ribbons, however rich and beautiful they might be, would be wanted. It was also apparent that the demand of the coming season would be for narrower widths, mainly from 2 to 16 lines.

Within the past fortnight, however, the requirements of the American market for the coming season, so far as can be predicted from here, would seem to be for plain ribbons of the following varieties:

1. Ottomans, or ribbed goods, in all varieties, as Ottoman *envers*, satins, Ottoman *envers* failles, and plain Ottomans, in simple colors or double-faced, that is, the opposite surfaces in different colors, or in two tones of the same color. The last of these varieties is for the moment the one in highest favor.

2. Velvet ribbons, and short plushes, with reverse faces of satin. These are also made in two colors or tones, as black, brown, and dark green, with reverse satin faces of orange cardinal and the brown shade known as terra cotta.

3. There will be also the usual steady demand for plain failles, satins, and narrow taffetas, which last are used by American manufacturers in immense quantities for tying up packages of cottons, perfumery, stationery, &c., or for binding worsted and other goods of domestic origin.

Basle has but few looms adapted to the weaving of real velvet ribbon, but nearly all the manufacturers here make short plushes, which, being cut open by hand, help to supply the demand for those qualities. Some exceedingly rich combinations of colors in these hand-cut velvet *envers* satins, are now in the looms for the American market.

The great staple of the season, however, will be Ottomans, which are being woven in great profusion and in many attractive combinations of color and effect.

Large expenditures have been made during the past three months in adapting thousands of plain looms to ribbons of narrow widths, and the facilities in this department are now probably greater than at any previous time, but the costly and elaborate Jacquard looms are mostly idle, and will remain so until fashion takes a new and radically different departure.

Raw silk, which has been steadily declining in price since last autumn, has probably reached its minimum value, at least until the market comes under the influence of the new season's crop. It is hardly probable that prices of the raw staple can even then be lower, while any failure or blemish in the cocoon harvest would of course be followed by an immediate advance.

It is expected here that the changes in silk duties which will be effected by the tariff law of March 3, 1883, will greatly stimulate the importation of silk goods into the United States, and the ribbon weavers of Basle and St. Etienne are setting their sails at full spread to catch the freshening breeze.

FRANK H. MASON,
Consul.

UNITED STATES CONSULATE,
Basle, April 30, 1883.

EXPORTS FROM GENEVA TO THE UNITED STATES.

REPORT BY CONSUL ADAMS.

According to the subjoined table, the value of the exportation from this district to the United States for 1882 was $1,179,611, an increase over 1881 of $322,358. The increase of each of the three principal articles is given in a second table. The exportation of watches is chiefly of the finer kinds, but there is a large increase in the inferior kinds, and in watch material. The increase in musical boxes is almost wholly in the cheaper grades manufactured at St. Croix.

The total exportation, which rose to $909,608 in 1871, fell in 1878 to $240,088, and rose again rapidly to the total of 1882. The increase is partly apparent only, and, in consequence of Department circular of June 20, 1881, requiring the declaration of invoices at the nearest consulate office, but there is no doubt that the sales to the United States are now far greater than ever before. They now, however, show signs of decrease, which I am inclined to explain by the prospect of revision of the tariff of import duties. I observe that the number of shippers has diminished, the business passing into the hands of a few houses as it increases.

Apart from the recovery of the American market, the past year has been an unfortunate one for the commerce of this district.

According to careful estimates made for the Journal of Agriculture in October, the harvests of cereals, hay, and fodder were good; of potatoes, moderate; and of wine, by far the most important, very bad, a little better perhaps than in 1880, the worst year ever known here, but much below the average both in quantity and quality. Since October it has rained incessantly in Central Europe, and the final results everywhere are worse than as indicated by the estimates.

As predicted in previous dispatches, the prosperity of the city and canton of Geneva has been compromised by the diversion of travel and traffic to the St. Gothard and other new lines of communication. The throngs of travelers that formerly gathered here during the summer are no longer seen, to the great loss of the hotels and the retail trade; the whole district of Upper Savoy is now fed by the new line from Bellegarde to Evian on the Lake, and the exchanges between Germany and the Mediterranean, formerly effected through Geneva and Marseilles by Lyons, or Turin by the Mont Cenis, now follow the St. Gothard to Milan and Genoa.

The Federal Council, acting, as it is said, in the interests of the railways of northern and eastern Switzerland, which belong to the St. Gothard system, have aided the displacement of traffic by suspending the tariff of freights over the West Swiss and the French railways. To complete the calamity a landslide at the entrance of the Jura has carried away the line below the city, cutting off all direct communication with France and Italy for months to come, the effect of which will be a great increase in the cost of all provisions from those countries, and a decrease in the wholesale trade of the city.

Financially, as a great banking center invaded during recent years by the French *crédit* companies, Geneva has suffered no less. Enormous sums, for so small a city, were drawn into the speculations of the Union Générale, and other similar enterprises, and lost there.

This combination of misfortunes has had one curious effect. Capital, intimidated by the risks of foreign investments, has been largely spent in the new constructions of the city, and Geneva to-day is one of the most commodious and attractive cities in Europe.

LYEL T. ADAMS,
Consul.

UNITED STATES CONSULATE,
Geneva, January 7, 1883.

TABLE A.—*Values of declared exports to the United States from the consular district of Geneva for the year* 1882.

Articles.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Total.
Aniline colors	$9,482 52	$9,129 67	$193 00	....	$18,805 19
Files and gravers	8,839 12	5,984 85	7,989 13	$12,336 68	35,149 78
Leather	94,952 46	120,484 63	136,762 78	137,581 57	489,781 44
Milk, products of	12,710 28	9,433 84	11,510 94	14,938 48	48,593 54
Musical boxes	6,355 60	21,203 51	36,461 06	48,459 97	112,480 14
Watches, including material	70,156 21	79,397 14	139,595 53	114,378 17	403,527 05
Wine and spirits	4,607 87	4,098 98	4,129 52	7,521 40	20,357 77
Miscellaneous	10,289 85	12,583 88	12,916 34	15,126 37	50,916 44
Total, 1882	217,393 91	262,316 50	349,558 30	350,342 64	1,179,611 35
Total, 1881	138,798 12	166,953 64	232,927 11	318,514 60	857,193 48
Increase	78,595 79	95,362 86	116,631 19	31,828 04	322,417 87

TABLE B.—*Values of declared exports to the United States from the consular district of Genera from 1878 to 1882.*

Articles.	1878.	1879.	1880.	1881.	1882.
Leather	$100, 081	$168, 563	$188, 842	$295, 034	$498, 781
Musical boxes	18, 466	36, 206	50, 534	86, 387	112, 480
Watches and watch material	97, 246	115, 046	224, 103	340, 056	403, 527
Other articles	24, 295	33, 573	85, 102	135, 716	164, 823
Total	240, 088	353, 388	548, 581	857, 193	1, 179, 611

EXPORTS FROM LYONS TO THE UNITED STATES.

REPORT BY CONSUL PEIXOTTO.

The declared exports from the consular districts of Lyons to the United States for the month of April just closed amounted to $621,466.37, and for the first four months of the year ending April 30, they amounted to $3,941,876.05. For the corersponding four months of 1882, they were $4,867,432.49—a decrease of $925,556.44.

The exports for April, 1882, were $941,098.68, being a decrease of $319,632.31, of which decrease $234,615.62 was in silk goods alone. In the decrease in the exports to the United States for the first four months of this year as noted above, $862,220.79 were in silk goods.

This very considerable decrease in the shipment of silk goods is owing to the new tariff, which, while under discussion, retarded and since its adoption (reducing the duties 10 per cent. and with the abolition of duties on charges at least 2½ per cent. more) has continued and will continue to retard this class of exports till after the 1st of July, the date fixed for the going into effect of the law.

The raw-silk market during April has undergone very slight changes. The exports to the United States from Lyons amounted to $99,623.70 against $178,701.20 for the same month last year.

The raw silks of China, comparatively high as compared with those of European production, have made transactions difficult, especially as the demand has been very limited. The question now is, will an advance in European silks cause a fall in Asiatics?

In the Cevenes district there remain quite important stocks of cocoons, the prices of which for the best yellow breed are $2.55, while the current qualities bring $2.31 to $2.41.

Marseilles has a dull cocoon market. Milan—no improvement is noted. At Turin weak prices, but some little activity for organzines. At London, resistance continues against lower quotations, and some considerable business is reported in Japans.

THE COMING SILK CROP.

Both in Italy and in France the season is behind at least fifteen days. The weather this spring has been unusually cool—not to say cold. The mulberry trees are backward, with vegetation in general. It is impossible to forecast with any certainty the coming *récolte*. It is, however, true that more seed has been prepared and that the later the season the greater the security against frost, while precautions have been taken in late years against too sudden and prolonged heat.

From a recent trip through the silk-growing region, from communications directly received, and from general prognostications I feel fairly tified in predicting a good silk crop for 1883.

FASHIONS FOR THE FALL.

The orders given here to manufacturers thus far for the autumn season point to figured silks and velvets as the coming mode. In fact even for summer, velvets are being largely used in connection with other material. Velvet bodices particularly seem to be largely in favor.

The prospect of fall trade is not to be thus early discounted, but all indications speak favorably.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, May 2, 1883.

ASPHALT AND ASPHALT TRADE OF CUBA.

REPORT BY CONSUL-GENERAL BADEAU, OF HAVANA.

In reply to the instructions of the Department, calling for a report on the asphalt trade of this island, I have the honor to state that before I assumed the duties of this office the vice-consul-general then in charge, Mr. Ramon O. Williams, had issued a circular letter to the consular officers in Cuba calling for information on the following points:

1st. The location of the asphaltum mines or beds of this island.
2d. The manner of mining it.
3d. The cost of production at shipping port.
4th. The annual yield.
5th. Names of ports of shipment and distance from the mines to port, stating facilities for transportation and cost of same.
6th. To what countries it is shipped and names of shippers.
7th. The average market value; and
8th. How many mines are now being worked.

To these inquiries the consular officers at Cardenas, Cienfuegos, Sagua la Grande, and San Juan de los Remedios made replies, which will be found appended hereto in full. The condition of the mines in the district of Havana is fully described below.

The consular officers of the remaining districts report no asphaltum mines in their jurisdiction.

The chief engineer of mines of this island, Don Pedro Saltarain, has also been good enough to furnish the consulate general with a detailed and elaborate report, and as there is no higher or better authority on the subject, I submit a translation entire of this valuable document.

It may be found to contain some statements identical with those made by the consular officers, but it seemed advisable to present these various views coming from different sources for the better information of those interested. I believe that together they will afford all the knowledge now accessible in regard to the location of the mines or beds from which the asphalt is obtained, the manner of its production, its cost and transportation, and the general condition of the trade.

ADAM BADEAU,
Consul-General.

UNITED STATES CONSULATE GENERAL,
Havana, April 19, 1883.

From the vice-consular agent at Cardenas.

U. S. COMMERCIAL AGENCY,
Cardenas, November 2, 1882.

DEAR SIR: Your communication of the 24th ultimo has been received, and I now have the honor to reply to your questions regarding asphaltum.

1st. The mines that are now being worked are located in the bay of Cardenas, in from 40 to 60 feet of water. There are others in the bay, but the cost of getting out the asphaltum is so great on account of depth of water that they have been abandoned. There are also others in the bay of such poor quality that they have never been worked since they were discovered. As far as I can learn there are only two mines on land in this jurisdiction, one of very good quality and the other worthless; neither of them are worked at present.

2d. It is broken from the bed with long iron bars, and then hoisted to the surface with drags made of iron.

3d. Between $25 and $30, Spanish gold, per ton, according to quality.

4th. About 200 tons.

5th. Cardenas, about 6¼ to 7 miles distant from the city. In lighters, and, generally speaking, in the same lighter that has worked the drag. Cost of transportation included in the cost of production.

6th. To the United States, principally New York, and some few small lots have been shipped to England and Germany. Mr. Juan Pde Torrónteguy is the only shipper at this port.

7th. It has, comparatively speaking, no market value here. The entire production is exported.

8th. Only two mines in the bay are being worked at present.

I have delayed a few days in replying to your letter, as Mr. Torrónteguy, the only miner of asphaltum in this district was away, and he was the only one who could give any correct information on the subject.

I have the honor to be, sir, very respectfully, your obedient servant,

JOS. M. WASHINGTON,
Vice-Consular-Agent.

R. O. WILLIAMS, Esq.,
United States Vice-Consul-General, Havana.

From the United States consul at Cienfuegos.

UNITED STATES CONSULATE,
Cienfuegos, December 8, 1882.

SIR: Referring to the letter of the honorable vice-consul-general, dated October 24, 1882, and to my preliminary answer thereto dated November 28, I beg to state that the following report regarding the asphaltum beds of this consular district may be relied upon as substantially correct:

There are bituminous deposits about one mile east of Santa Clara—one well 4 or 5 feet deep, of an oily substance and inflammable. Five or six years ago arrangements were made to work this locality for petroleum, but the project was abandoned.

Another and larger deposit is about 15 miles from Santa Clara, in the direction of Sagua la Grande, near "El Indio" plantation.

Several other deposits are in Camajuani, about 18 miles from Santa Clara, in the direction of San Juan de los Remedios.

All of the foregoing are more or less of a liquid character.

There is a deposit of a solid character located about 10 miles from Santa Clara, toward Remedios. The locality is called "Sabanas Nuevas." This deposit belongs to the gas works at Santa Clara. It has never been worked for shipping purposes, but the asphaltum has been excavated in a rude way, and used at the gas shop in Santa Clara, the excavation being 8 yards deep and 20 by 5 in length and width. The whole subsoil at this place is asphaltum of the best quality, and is found within three feet of the surface of the ground.

It is believed, from signs noticed in the neighborhood, that another large deposit of asphaltum might be found about three miles from Sabanus Nuevas, in the direction of Santa Clara.

Another bed of solid asphaltum is noticed 3 miles from Ranchuelo, and in 12 yards of the Sagua River. It belongs to Mr. Diego G. Abren, who resides at Ranchuelo. Little or nothing is known of it beyond the fact of its existence. I fear I have somewhat overstepped my instructions by not confining this report to the limits of my consular district; but considering that I have specified the several localities, and considering further the difficulty in obtaining information on such subjects in Cuba, I have taken the liberty of reporting all the information I possess.

Replying to the questions as propounded to me by number, I beg to say:

1st. The locations are stated as above.

2d. None of the beds have been worked except in a rude and limited manner.

3d. The cost of production with proper machinery is not known.

4th. I should estimate that the annual yield would be considerable if properly worked.

5th. Transportation in Cuba, either by road or railroad, is not so good usually as in the United States. Santa Clara has an outlet by railroad to both Cienfuegos and Sagua, and the several localities named are, as shown above, only short distances from one or the other of these roads.

6th. None has ever been shipped abroad that I can hear of.

7th. The products of these beds have never been on the market.

8th. None of the beds or mines referred to are being worked, at least to any extent worthy of note.

Very respectfully, your obedient servant,

WM. P. PIERCE, *United States Consul.*

Hon. ADAM BADEAU,
United States Consul-General, Havana.

From the commercial agent at Sagua la Grande.

SAGUA LA GRANDE, *April* 10, 1883.

SIR: I beg to acknowledge receipt of your telegram of last night, asking if I had answered regarding the inquiry of the 17th October in relation to asphaltum mines in this jurisdiction. This matter I have no knowledge of, as it was received by Mr. Martinez about a month before my return from the United States, but as the subject is one that has been talked of a good deal I am able to supply the following particulars:

There are two undeveloped asphaltum mines in this jurisdiction, situated on the sugar plantation of San Antonia, owned by a man named Flagué, located about 30 miles from this point, the railroad running through the place. The cost of transportation to the port would be about $5 per hogshead. As they are undeveloped I am unable to give the manner of working, the cost of the production, the possible yield, or the market value.

As far as I have been able to ascertain these are the only known mines or deposits in this department.

I am, sir, very respectfully, your obedient servant,

CLARENCE C. FORD,
United States Commercial Agent.

Hon. ADAM BADEAU,
United States Consul-General, Havana.

From the vice-commercial-agent at Caibarien.

CAIBARIEN, *November* 21, 1883.

DEAR SIR: My friend, Mr. José Martinez, is here and has given me the following information in regard to the asphaltum mines:

1st. That in Jatibonico there are four asphaltum mines, located on both sides of the river Jatibonico, in the jurisdiction of Puerto Principe (Moron) and Sto. Espiritu; but they are not known in either province, because the little that has been extracted from them has been exported through Caibarien. They are close to the jurisdiction of Remedios, toward Mayajigua. On one side of the river there is a bed of asphaltum, in the jurisdiction of Moron, and another in the same river; and toward the other side of the river, in the jurisdiction of Sto. Espiritu, there are two others; these have never been worked, and have, indeed, only lately been opened.

One of the beds, the one in Moron, is liquid and can be easily ignited. It is known by the name of "Mal Nombre."

The one that offers most advantages from its abundance and quality is the one in the river; it has a beautiful color.

The one in Moron is situated on the estate of Encarnacion-Leyba; the one in the river on the property of Mrs. Rita Marin; and of the two in Sto. Espiritu, one is on the estate of Mr. N. Legon, and the other on that of Mr. José Oropesa.

Mr. Francisco de la Calzada had these mines denounced to the Government and obtained possession of them; but in order to avoid argument with the owners of the ground he paid them $50 a year for each cabaleria (33¼ acres) where asphaltum was found. The said Calzada died some three years ago, and ever since the mines are almost uncared for, and even he had very little profit out of them. He brought a pump that was never set to work, being part of it in Mayajigua and the other part in Jatibonico.

2d. The asphaltum was taken out by means of picks and crow-bars, for it was really never mined, being only worked on the surface. From the mines the asphaltum was conveyed on mules backs as far as the road to Mayajigua, or rather to the hill of "Los Angelos" (3 miles), and from there in carts to Rosa Maria (6 miles), where there is a railroad named "Sagua and El Estero Real" (4½ miles).

3d. The cost of the asphaltum, from the mines to El Estero Real, is $12 per ton, but it could be done for $10 if there was anybody who would work up the mines. From "El Estero Real" to Caibarien or Cayo Frances the conveyance is done in lighters at $1.50. It is easier to go to Cayo Frances, as the winds are more favorable. The cost of working the mines is not known, neither the yearly yield, because, as already stated, the work done has been merely a trial.

5th. From the mines to El Estero Real, on the coast, it is 13½ miles, and from there to Cayo Frances or Caibarien, 15 or 16 miles.

6th. The little asphaltum that was taken out by Calzada was sent to the United States, where it obtained a prize at the Exposition at Philadelphia.

7th. The market value cannot be told, as what the cost would be of extracting the mineral is not known.

This is the only asphaltum in the place.

Mr. Martinez tells me that if a sample of said asphaltum is desired he can procure you a bag of same. He also tells me that from the foot of "Los Angelos" to the shore a railroad could be easily made, as the ground is level and not rocky; there is only one stream, and the only work would be to remove the ground. There is plenty of wood for the work.

I am sir, your obedient servant,

JOSÉ G. FUENTES,
Vice-Commercial-Agent.

RAMON O. WILLIAMS, Esq.,
Vice-Consul-General of the United States, Havana.

Report on mines of asphaltum and bituminous oil in the island of Cuba.

[Furnished the consulate-general of the United States at Havana by Don Pedro Saltarain, chief engineer of mines of the island.]

The scientific societies of Havana have, on different occasions, called attention to the abundance of bituminous mineral existing in this island, and several reports, such as those of Don Joaquin J. Navarro, written in 1829, that of the civil engineer, C. Moisant, in 1857, as well as certain articles published in the "Diario de la Marina," describe the various beds of this substance and set forth the advantage to be derived from its employment for fuel or in the manufacture of gas to be used for lighting, or from its application in ship-building and for other industrial purposes.

The serpentine formation, considered under this generic denomination, composed of serpentine with dikes of diorite of different varieties, is without doubt the most extensive and metalliferous in this island, and either itself contains all the beds of bituminous mineral, or has been the cause of the contiguous layers, a fact I have had opportunity to determine in the several explorations made by me up to the present time.

Whether this rock is eruptive or whether it is the diorite alone, which in general occupies the central part, that metamorphoses the surrounding serpentine, it appears evident that the formation took place at the end of the Cretacean period at the same time with that of the bituminous beds existing in it or inclosed in the adjacent strata of this period.

The bituminous mineral is found in three conditions—solid, soft or pasty, and liquid; and as in general the purity and quality of the beds bear some relation to the nature of the surrounding soil, the layers inclosed in sand and Cretacean marl are always of solid asphaltum mixed with earthy materials from the circumjacent layers, while the beds of liquid or pasty mineral are almost exclusively of the serpentine formation, with, besides, this marked difference between them and the solid asphalt, that the former are found in irregular veins, for the most part slight in yield, and with little or no proportion of earthy matter from the rocks that incase them. And so marked are these distinct characteristics that it is often sufficient to inspect a specimen of the mineral to determine with probability, from its condition and greater or less purity, the class of soil and of bed from which it is taken.

The soft and liquid minerals are respectively true pissasphalt, and oils more or less bituminous, and are almost always found in the serpentine formation; these acquire a greater and often a complete solidity on the surface in consequence of the evaporation of the essential oils which they contain.

Neither of these classes of minerals is worked, although in some localities they are used in small quantities for lighting purposes, but they are valuable indications of the probable existence at greater depth of lighter oils, petroleum or naphtha, indications which, in other conditions of development of the mineral industry, would have caused more numerous and elaborate investigations than the feeble attempts which have hitherto been made.

Nevertheless, the works accomplished and the discovery of deposits of naphtha oil in the mine called "San Juan," situated in the province of Santa Clara, district of San José de los Ramos, hacienda "Motembo," distant more than three leagues north of the railroad station San José de los Ramos, and about as far as the coast, are of great importance and worthy of special mention.

For some time attention had been directed to the fact that at many points of this locality hydrocarbureted gas was escaping, and with the object of investigating the circumstance, Don Manuel del Cueto obtained the requisite permission from the government general, and in the year 1880 established a boring. After several attempts, which were ineffectual because of his little experience in this class of operations, he discovered, August 18, 1881, at the depth of 95 meters, a deposit of naphtha oil of extraordinary purity, which yielded some 25 gallons daily. Its special characteristics are that it is colorless, transparent as the clearest water, easily inflammable, and leaves no sensible residue after its complete combustion; its density is 0.754, it boils at a tempereture of 85°, dissolves asphaltum and resinous matter, and, in fine, possesses the characteristics of a naphtha of the rarest and most exceptional limpidity and purity.

In the hope of obtaining greater quantities of the oil the boring was continued, and at the depth of 748 meters another deposit of the same substance was discovered with a yield of 250 gallons daily.

This yield, however, soon diminishing, it was determined to continue the boring; but the operation unfortunately had to be discontinued at the depth of 300 meters, and at a time when the escape of gas was greatest, on account of the breaking of the cable used for drawing up the oil, and up to the present time it has been impossible to extricate it.

Such is the present condition of this interesting mine, but it is intended to make other borings at points where, owing to the analogous conditions, it is presumed that new deposits exist and where a favorable result is anticipated.

Besides these mines another of bituminous oil is worthy of mention in the district of Lagunillas, province of Matanzas, three or four leagues southwest of Cardenas. Its yield has not been great during the last few years, not reaching more than 70 liters daily, which flow from the sides and bottom of a well of 35 meters depth; but there is now a company preparing a preliminary boring in the hope of increasing the yield. This oil contains a great quantity of the bituminous element, and requires one or two classifications for the extraction of the petroleum, the principal object proposed by the company referred to.

From the same neighborhood two other petitions have been presented to the Government, asking concessions for mining the same substance, and the respective boundaries are now being determined.

Another mine of bituminous rock existing in the same province of Matanzas is of great interest, both from its quality, judging from the specimens presented to the Government by those interested, and from its abundant yield and favorable situation. It is only one kilometer from the north coast, at a place called "Rincon de Puerto Escondido," municipal district of Hato Nuevo, so that transportation for its products is cheap and easy, a circumstance well worthy of consideration in the working of this class of mines. Although it has been said that the mine is a bituminous rock, its fissures contain a great quantity of soft asphaltum, which, according to information received, constitutes the principal feature in the richness of the mine.

To this group of soft or liquid asphaltum it would seem, from its manner of formation, certainly belongs the well-known asphalt of the Bay of Cardenas; since, judging from its appearance, and from the shells and live coral to which it is found adhering, and which are included in its mass, it is probable that it has at some comparatively recent period assumed the liquid state and spread over the bottom of the bay. The masses of which it is composed are sometimes 70 feet in thickness, of great purity, and much esteemed in the market of New York, where they sell at prices ranging from $80 to $120 a ton.

The foregoing are the principal mines which, from the present condition or the recent origin of these minerals can be considered as included in the group of soft or liquid bitumen; and I pass now to a short account of the most notable mines of asphalt, properly so called, which are in the provinces of Havana and Pinar del Rio.

In the province of Havana are the mines "Santa Teresa," "Jesus del Potosi," and "Santa Rosa." The first is situated in the town of Las Minas, near the Bahia Railroad. It was worked by a company until 1862 by means of wells and galleries to the depth of 86 meters. Its bed consisted of a vein of excellent mineral in the serpentine formation, but whether it became exhausted, or whether proper search was not made, or from some other cause, the mine has been completely abandoned.

Those called "Jesus del Potosi" and "Santa Rosa," the property of Messrs. Glynn and Gomez, border on and are located in a place called "Las Chumbas," half a league south of the station of Campo Florido, on the above-mentioned railroad and on the shores of the river Bacuranao.

The mass or masses of asphalt taken from them are placed between the cretacean marl and the serpentine rocks which are found on the north, their direction being from southeast to northwest, with an approximate width of 5 to 6 meters, and extremely deep. This asphalt is quite impure, owing to the earthy matter which it contains; but, on the other hand, to the mixture of the said earthy substance is owing, without doubt, its more advantageous application as combustible in grates and retorts for the elaboration of gas, as is evidenced by various experiments made for the purpose, as also for street pavements, &c.

The slight nature of the preparatory works hitherto established, and the necessity for others which, though not properly belonging to the mines, were indispensable to their proper working, account for the fact that no more than 500 to 700 tons have been extracted during the present year; but it is safe to say that a bed, at once abundant and easily worked, exists; besides which, one of the most indispensable conditions for cheap transportation is assumed, namely, its proximity to the railroad station of Campo Florido, distant some 15 miles from Havana.

The remaining mines of asphaltum now working are in the province of Piñar del Rio. Those named "San José" and "Constancia" are the property of Mr. Henry L. Crawford, and near the town of Banes, on the banks of the river of the same name, which permits an easy transportation of the mineral to the neighboring port. Notwithstanding this favorable position of the mine, and the facts that the various masses of asphalt are near the surface, only few and insufficient works exist, and the production has hardly reached 400 tons during the last two years.

The mines in the same province, entitled "Rodas Concepcion" and "Magdalena," belonging to Don Ramon Balsinde, as well as the sugar plantations "Cañas" and "Tomasita," on which these are located, at the head of the extensive Bay of Mariel. These are mines worked under the open sky, upon masses of asphalt, notable for their dimensions especially the mine "Magdalena" of the plantation "Fomasita," which measures, in the part already laid bare by the works, 12 meters of thickness, more than 100 in length, and 15 to 12 meters in depth. This mass lies in the direction of west-southwest to east-northeast, and is probably a continuation of the other two mines situated on the neighboring plantation of Cañas.

The quantity of mineral obtained in these mines amounts to 1,000 to 1,300 tons a year, which is partly consumed on the same estate of Señor Balsinde, as fuel, and in the production of gas for lighting purposes.

Besides these, there exist other mines, which are either not of so much interest, or have not been officially examined; but those named are already sufficient to prove the abundance of these bituminous substances existing in the island, especially on the northern coast, and to demonstrate the great advantages which might be derived from working them, both on account of the quality and quantity of the mineral, and from their proximity to ports, rendering them of high importance and worthy of particular attention from individuals or companies interested in the mineral industry.

THE WORLD'S SILK INDUSTRY.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

I have the honor to submit the following general report on the present state of the silk industry of the globe.

The object of this dispatch is to present to the American silk grower and manufacturer a brief but correct statement of the actual situation of this important industry throughout the world.

France.—For general historical survey I beg to refer to my dispatch of October 1, 1878; for details of the industry in all its branches, filature moulinage, and fabrique, to my dispatches for the past four years.

To-day the silk manufactures occupy in the city proper and contiguous departments upwards of 120,000 looms, about 20,000 being power looms, and the production of silk stuffs amounting annually to about $80,000,000, $30,000,000 of which are mixed goods—silk and cotton, silk and wool, silk and linen, &c.

Austria.—Though dating back many years the manufacture of silk goods has only within the past five or six years assumed an importance which has attracted serious attention.

The Government has recently again come to the aid of an industry which presents so many and varied and happy means for the occupation of no very inconsiderable portion of the community.

The chief centers of the silk manufacture are in the provinces of Bohemia and Moravia. Around Vienna are clustered factories which produce only the finest tissues. Nearly every variety of silk goods are manufactured.

The average weekly wages of ordinary weavers range from $1.15 to $1.30. Expert weavers, in fine goods, earn from $4 to $6 per week.

Austrian manufacturers copy and produce with remarkable fidelity the goods of Macclesfield, Zurich, Crefeld, and even approaching those of Lyons.

About 15,000 to 20,000 looms, of which 3,000 are power looms, are employed.

The total production of silk goods is estimated at from $10,000,000, to $15,000,000.

So successfully have the Austrians competed with other rival countries that they are not only able to supply largely the wants of home consumption but to ship goods to the Danubian countries, where they have succeeded in obtaining important footing.

The recent tariff laws on silk goods of from 15 to 30 per cent. have in no small degree served to protect and develop the home industry.

Formerly, Austria-Hungary was one of the best customers of Lyons, but, like Germany, this country has reduced her importations from France to insignificant figures.

Holland.—Comparatively few silk manufactures exist. Rotterdam is the principal point.

Portugal.—The same is true of this country, which, like Holland, imports most of its silk tissues.

Belgium.—At Antwerp very excellent goods are produced. I have remarked the superiority of this manufacture some years since in returning home from Roumania. In general, however, Belgium's production of silk goods is extremely limited.

Russia.—The silk manufactories of Russia owe their creation to Lyons. In other years Russia was a very large consumer of the silks of France. Later on she took from Lyons not only workmen, but a number of very important matters in the art of weaving. Once a very rich customer, actually Russia produces for herself the majority of silk goods which she consumes.

The total production of silk tissues may be safely calculated at $16,000,000.

In fact, except for velvets and very cheap goods of silk and cotton mixtures Russia asks but very little from other countries, always having regard to the costly silks of French manufactures, of which she still takes fair quantities.

Syria and Asia Minor.—Twelve thousand looms, with a production of from $4,000,000 to $5,000,000 of manufactured stuffs. It is, however, difficult to estimate the actual production and consumption. I particularly noticed this fact last year, in my visit to these countries, when enjoying the privilege of the congé accorded me by the Department. There are actually more silk goods consumed and sold in these countries than is generally known abroad.

Very good silk is also produced from the cocoons raised; in fact I noticed some exceptionally good silk, and on my return to Lyons found this quality commanded a very important price.

India.—There are probably not more than three thousand to four thousand looms in India, producing annually from $800,000 to $1,000,000 worth of silk goods. These tissues are made from the native silks, and are called Corah and Tussor. I am personally acquainted with a Lyons house who sell about $200,000 of the silks products of India.

The production of silk amounts to about 12,000 bales annually, of 70 kilograms to the bale, which I value, in round figures, at $7,000,000, 6,000 bales of which are shipped to France and England.

China.—Though official statistics are lacking, the most reliable authorities fix the number of looms at 350,000, the production of silk stuffs at $60,000,000 to $65,000,000, of which $6,000,000 to $7,000,000 worth are exported. There is no country where silk fabrics are so generally and so largely consumed as in China—no country which produces such varied and brilliant colors and such variety and peculiarity of goods.

The wealthy classes not only dress entirely in silk, but furnish every part of their habitation with this lovely and beautiful textile.

The sobriety and economy of the Chinese is proverbial.

The wages earned are utterly insignificant in comparison with European and American labor. A reeler of silk is happy to gain 6 cents per diem, a weaver 15 to 20 or 25 cents. A thousand years have scarcely wrought any changes. What the introduction of automatic machinery would accomplish no words can tell.

With her wonderful harvest of the raw material, of which scarcely more than 90,000 bales are exported, the introduction of modern machinery would completely transform this industry, which at present rests in very near the same state as in the time of Confucius.

Japan.—Here again official statistics are wanting, purposely perhaps, and even those who have lived long in the country furnish contradictory reports. From the best authorities (personal as well as from commercial reports) I fix the figure of looms at 220,000. The production is almost entirely consumed at home, the export of manufactured silks being still inconsiderable.

I beg to remark that throughout this present dispatch I am referring almost entirely to manufactured piece goods, ribbons, handkerchiefs, scarfs, &c.

Spain.—The Moors brought, with many other contributions, silk manufactures into Spain. In the ninth century Spain already produced stuffs of silk and gold celebrated for the beauty and costliness of their manufacture. In the past, Murcie, Valence, Saragossa, and a few other districts, were the centers of this industry. To-day Barcelona is preeminently the great manufacturing section of Spanish silk.

In the absence of official statistics it is estimated that there are 10,000 to 12,000 looms, producing from $6,000,000 to $8,000,000 annually of silk goods.

Italy.—For many centuries Italy enjoyed the monopoly for the manufacture of silk goods.

In my dispatch of October, 1878 (referred to above), I have described how very largely this industry was transferred to France.

At present, such cities as Genoa (celebrated in all times for its velvets), Florence, Milan, Como, Venice, Naples, Bologne, Turin, &c., scarcely possess in total more than 30,000 looms, and Como is among the largest places of production. It is estimated that the Italian manufactures of silk stuffs amount to from $10,000,000 to $12,000,000. I regret to say that here, as elsewhere in Europe generally, the Government have no official statistics.

Switzerland.—Silk manufactures were undoubtedly originally introduced by weavers from Lyons. Religious persecution drove many of the workmen of this silkopolis to the land of William Tell.

In 1855 she had about 25,000 looms. In 1882 she possessed upwards of 40,000, more than 4,000 of which are power looms, while her production of silk goods amount to from $16,000,000 to $18,000,000.

Zurich is the principal manufacturer of broad goods, Basle of ribbons.

Switzerland exported to the United States in 1881, from Zurich alone, over $4,000,000 worth of silk goods, increasing the figure by $450,000 last year. Zurich produces for the most part plain goods, black and colored; recently, however, she has been remarkably successful in armures, satins, serges, and marcelines.

Basle has become the great competitor of St. Etienne, and with the United States has all but annihilated the once famous capital of the Loire.

Our gifted representatives, Mason, has gone so extensively into the subject of Basle's production that further remarks are unnecessary.

Labor forms but a fourth of the cost of production in Switzerland; in France it is nearly a third.

Great Britain.—Tradition attributes to John Hemp, who lived in the fourteenth century, the introduction of silk manufactures.

The revocation of the edict of Nantes drove many French weavers to England and gave an immense development to this industry. At that epoch silk goods were admitted (as they are to-day) free of duty, but the Government, yielding to the strenuous influence of the great weavers, prohibited, in 1697, the introduction at first of French goods, and later those of all other countries. The results of this Draconic law did not answer expectations, and in 1824 it was repealed. The number of looms at that time did not exceed 24,000. The prohibitory laws were followed by customs duties, which was an advance towards liberty of commerce, and proved advantageous.

In 1829 England numbered 50,000 looms; in 1855, 110,000; and in 1860, 150,000. The production was then estimated, including every variety of goods into which silk entered as a component part, at $60,000,000. It is probable this figure was exaggerated, though it is given by the late Mr. Arles Dufour, a man who probably did more for Lyons than any other of his time. Great has been the decay of this industry since then, and since the French treaty of commerce of 1880 England's silk prosperity has fallen constantly.

In 1872 she possessed but 65,000 looms, 12,378 of which were power.

The imports of silk goods in that year into England are given at $44,000,000.

From all the evidence I can obtain at this writing I place the present production of silk goods in England (not including ribbons and bindings) at $22,000,000 to $25,000,000.

England excels particularly in plush-velvets, crapes, Surah's moire-antique, umbrella silks, ribbons, galoons, handkerchiefs, cravats, and goods of silk mixtures.

The principal centers of silk manufactures are for broad goods, Manchester, Macclesfield, Bradford, and Spitalfields; for marcelines, Macclesfield; for crapes, Norwich; for taffetas, Manchester and Macclesfield; for velvets, Bradford and Manchester; for ribbons, Coventry and Nottingham; for figured silks (faconnés), Bradford, Manchester, and Macclesfield; for handkerchiefs, &c., Glasgow and Manchester.

Saxony.— In recent years there has been a remarkable development of silk manufactures in the little but ever-industrious Kingdom of Saxony.

The liberal introduction of machinery has greatly contributed to this happy result. There are a number of factories which possess from 800 to 1,000 looms.

Germany.—Silk manufactures were first introduced in the sixteenth century. French weavers driven from France again appear as the principal founders. The Rhine provinces and Brandenburg became the centers of silk weaving.

In later years the development has been extraordinary. In 1882 the number of looms in Germany was estimated at 75,000 to 90,000.

At Créfeld there were 35,000 to 40,000 looms. In 1881 the production of that place alone was $20,000,000.

The total production of Germany is fixed at $45,000,000, without including ribbons, of which about $8,000,000 to $10,000,000 worth are manufactured.

Créfeld has at present 25,000 to 30,000 looms devoted to velvet, and from 45,000 to 50,000 looms altogether.

In ordinary seasons the silk manufacturing interest of Germany is divided into two-fifths for velvets, three-fifths for all other varieties. For the past two years this proportion has been reversed. Créfeld, Elberféld, Barmen, Virsen, Mulheim, &c., are the chief towns devoted to this industry. There are upwards of one hundred and forty manufacturers located at Créfeld out of the 300 which Germany is reputed to possess.

It is incontestable that Germany has badly beaten France and all other countries in the last five years in the production of that class of silk goods which enter so largely into popular consumption. If she once imitated other countries, and particularly her great rival France, she to-day manufactures quite as original designs, which, if still lacking in that exquisite taste for which Lyons is justly celebrated, are sufficiently varied to please and distract and find large consumption.

To the manner of living of the German weaver, his domestic habit and working, his regular hours and regular work for the same manufacturer, and to the custom of the manufacturer himself in buying the raw material on from six to nine months' time, to his ready adoption of new devices and new inventions, must largely be ascribed the wonderful success of the Teutonic silk manufacture.

The United States.—In making this general review of the silk manufactures of the world I may be permitted to allude even to our own country, though naturally approaching the subject with due deference to the latest statistics furnished to the recent census by the "Silk Association of America." I have, however, as a consul of the Government of the United States, to appreciate the general commercial situation without prejudice, and in that true spirit of impartiality which becomes a servant of the whole people, and not of any one particular class.

Twenty-odd years of high protecting duties, averaging fully 50 per cent., and for at least a fourth, if not a third, of our imports as high as 60 per cent., has largely contributed to build up our silk manufactures, whose total annual production (including *all* varieties of goods) may safely be fixed, at present, at from $35,000,000 to $38,000,000. Probably not more than $15,000,000 (if that) come into direct competition with the piece goods fabrication of Europe.

To our enterprising spirit and recognition of the economical idea in the adoption of mechanical force, as much as to our tariff, are we indebted for the present position of our silk industries. In the near future it will more than ever be to the genius of American invention, and its application, that the United States will keep what she has already acquired, and become one of the richest silk producing and silk manufacturing countries of the globe.

TOTAL PRODUCTION.

The total production of silk goods in the world may be estimated at about $350,000,000. Deducting the manufactures of China and Japan, whose economical situation is so very different from other countries, there remain $270,000,000 worth of silk manufactures, which may be divided among different countries, taking the maximum as follows:

France	$85,000,000
Germany	45,000,000
United States	35,000,000
Great Britain	25,000,000
Switzerland	18,000,000
Russia	16,000,000
Austria	12,000,000
Italy	12,000,000
Spain	5,000,000
Other countries	17,000,000
Grand total	270,000,000

I admit that these figures are subject to criticism, but am inclined to think that while the distribution may not be entirely correct the total sum is very nearly so.

If the manufacturers and merchants of the New World incline to conceal the veritable figures of their affairs, they but feebly imitate those of Europe and the eastern hemisphere who have hidden and probably continue to hide the extent of their transactions.

I estimate 470,000 as the number of looms employed in the silk goods production, including power looms, which thus explains the difference, for if hand looms were alone used the number would be very considerably greater.

In a subsequent dispatch I propose to review the production of the French manufacture, which in latter years has fallen so largely behind.

The present dispatch is intended to present simply a *coup d'œil* of the silk manufactories of the world. The interested will naturally follow up the subject in all its details.

BENJAMIN FRANKLIN PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, *February* 7, 1883.

6 JUL 83

SILK CONSUMPTION OF EUROPE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The condition houses of Europe received and passed in 1882 7,617,157 kilograms of silk; in 1881 8,594,023 kilograms of silk; in 1880, 7,196,986 kilograms of silk; dividing these figures by countries the following is the statement for the past three years:

Silk conditioned in Europe during the years 1880, 1881, *and* 1882.

Countries.	1880.	1881.	1882.
	Kilograms.	*Kilograms.*	*Kilograms.*
France	3,281,754	3,654,733	3,272,970
Italy	2,374,004	2,826,323	2,494,797
Switzerland	784,737	1,157,652	949,478
Germany	622,288	791,888	766,070
Austria	95,614	121,275	96,603
England	38,589	42,152	37,239
Total	7,196,986	8,594,023	7,617,157

Thus it appears that the general depression of trade during the past year has affected all countries, though in different degrees.

The falling off between 1882 and 1881 has been, for—

Countries.	Quantity.	Per cent.
	Kilograms.	
France	381,763	10.4
Italy	331,526	11.7
Switzerland	208,174	18.0
Germany	25,818	3.2
Austria	24,672	20.0
England	4,913	11.6
Total	976,866	11.03

Austria and Switzerland seem to have suffered the largest decline, while Germany has been favored, owing to the precedence she has taken in the production of low priced silk goods, especially for velvets of mixed tissues.

Switzerland has not escaped the general depression and apparently suffered even more than France.

These figures, however, are but apparent figures, if regard is had to the fact that Lyons, as a raw-silk market and seller of organzine silks, supplies very largely foreign places, particularly Germany and Switzerland, enjoying thus an exceptionably favorable distinction over other silk centers.

This is fully proved in consulting the reports of the French custom-house, which furnish the exports as well as the imports of the country.

The exports of French worked silks to Germany and Switzerland for the past two years were as follows:

Year.	To Germany.	To Switzerland.	Total.
	Kilograms.	*Kilograms.*	*Kilograms.*
1881	15,583	168,414	183,993
1882	18,069	289,223	307,292

Admitting, which is not entirely true, that all silk exported for Swiss and German consumption was conditioned in Lyons, deducting from the above figures those silks actually known to be of French condition, and adding these to the Swiss and German conditioned silks, the result obtained is as follows:

Countries.	1881.	1882.	Decrease.	Per cent.
	Kilograms.	*Kilograms.*	*Kilograms.*	
France	3,470,736	2,965,678	505,058	14.5
Switzerland	1,322,066	1,238,701	83,365	6.3
Germany	807,471	784,139	23,332	2.8

I am inclined to believe that these figures represent nearest the comparative general consumption of silk in the three largest manufacturing countries, viz: France, Switzerland, and Germany for the past two years. If this be true, then it is quite clear that French silk manufacturers have suffered most from the general depression.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, *February* 15, 1883.

SUPPLY AND CONSUMPTION OF SILK IN FRANCE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

Referring to the foregoing dispatch, No. 303, of yesterday, I beg to submit a report on the supply and consumption of silk in France for the past year of 1882.

The French silk markets derive their supplies from two sources:

First, from the native production of the country.

Second, from silks imported from foreign lands.

The native production for 1882 was 834,000 kilograms of raw silk.

The foreign import was—

1st, of raw silks 1,920,017 kilograms; 2d, worked silks 672,998 kilograms; total 2,593,015 kilograms; besides 26,000 kilograms derived from dried cocoons imported at Marseilles.

The total supply of silk for France in 1882 amounted therefore to 3,453,015 kilograms, derived as follows: 834,000 from cocoons harvested in France; 1,920,017 from foreign raw silks; 672,998 from foreign worked silks; 26,000 from foreign (dried) cocoons imported at Marseilles; total 3,453,015 kilograms.

Examining the statistics for the past nine years in regard to the same subject, I find the following interesting figures:

The silk supply of France for the past nine years (1873–1882).

Year.	French silk.	Foreign silk.	Total.
	Kilograms.	*Kilograms.*	*Kilograms.*
1873	549,000	3,138,000	3,687,000
1874	731,000	4,263,000	4,994,000
1875	731,000	3,993,000	4,724,000
1876	155,000	5,286,000	5,441,000
1877	872,000	1,949,000	2,821,000
1878	608,000	3,974,000	4,582,000
1879	375,000	3,342,000	3,717,000
1880	525,000	3,549,000	4.074,000
1881	700,000	3,714,000	4,414,000
1882	834,000	2,619,000	3,453,000
Total	6,080,000	35,827,000	41,907,000

It will be noticed from the above table that though there was a considerable increase in native production the supplies of raw silk taken by the French market in 1882 were less, with the exception of 1877, than for ten years.

Turning to the question of consumption, I find on examining the reports of the French condition houses located in the silk growing and silk manufacturing centers of France, the following to have been the amount of silk entered and conditioned for the past three years:

Condition houses.	1880.	1881.	1882.
	Kilograms.	*Kilograms.*	*Kilograms.*
Amiens	1, 401	3, 587	2, 623
Aubenas	113, 459	114, 589	114, 633
Avignon	131, 616	139, 279	130, 659
Lyons	2, 207, 096	2, 481, 370	2, 204, 578
Nimes	2, 243	1, 952	....
Paris	205, 919	215, 064	181, 629
Privas	21, 168	20, 356	24, 205
Roubaix	3, 997	9, 445	26, 603
St. Etienne	568, 845	642, 850	567, 664
Valence	26, 010	26, 241	20, 376
Total	3, 281, 754	3, 654, 733	3, 272, 970

An increase is here also noticeable, but while the silk supply for 1882 shows for the average with 1880–'81 a diminution of 791,000 kilograms, or 18 per cent., the silk consumption for the same time marks a decrease of but 195,000 kilograms or 5½ per cent.

From these facts it may fairly be concluded that large inroads have been made upon the stocks of raw material left from previous years, which are now fast disappearing, bringing the latest production alone on the market.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, February 16, 1883.

EUROPEAN SILK GOODS EXPORTS.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

I beg now to present the *official* figures of the exports of silk goods from France, Italy, England, and Switzerland for the past year in comparison with those of 1881.

Countries.		1881.	1882.	Increase.
				Per cent.
France	francs	245, 128, 000	301, 419, 000	23
England	£	2, 564. 730	2, 692, 344	5
Italy	francs	11, 773, 000	14, 296, 000	21
Switzerland	kilos	3, 090, 700	3, 660, 500	29

As will be noted there was a very considerable increase in the silk goods export of the above-named countries, and though the *official* statement of Germany has not yet come to hand, there is little doubt, considering the great favor her manufactures of cheap velvets have enjoyed, but what her exhibit will show an equally large augmentation.

These official figures will doubtless cause much surprise to those who have regarded the past year in Europe as singularly one of depression, and the astonishment will be increased when, consulting the custom-house reports for the same periods, the following results will appear for imports:

Imports of silk goods for the years 1881 *and* 1882.

	1881.	1882.
France……francs..	49, 576, 000	41, 293, 000
England……£..	11, 699, 667	11, 172, 000
Italy……francs..	32, 183, 000	29, 127, 000
Switzerland……kilograms..	120, 400	144, 000

Increase in the exports on the one side and diminution in the imports on the other is the striking feature here presented.

The question naturally arises, to what country or countries have the excess of exports gone?

The United States answers very largely this inquiry. Her silk goods imports for 1881 were $31,637,377 and for 1882 $38,632,034, or very nearly $7,000,000 increase for the past year.

Thus while the consumption in the *Old* World has remained within the closest limits, the development in the *New* has continued and *continues* to furnish outlets for superabundant production.

Considering that a very large part of our silk imports are goods that we can produce at home almost if not entirely as advantageous, our manufacturers have in my judgment only to encourage and promote sericulture in the United States and to adopt the recently discovered processes for reeling silk, which the Serrell automatic machinery will give them, to arrive at an independence such as they have obtained in cotton fabrics.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, *February* 27, 1883.

SILK CROP FOR 1883.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

I beg to submit the following brief report on the coming silk crop for 1883.

Though yet too soon to form any definite opinion, owing especially to the backwardness of the season, which appears to have been general, the following information, which I have obtained from reliable sources, may prove interesting:

France.—Vegetation progresses slowly; incubation generally retarded.

In the departments of the Drome and Ardeche hatching has commenced; no serious complaints.

In the Gard and Vaucluse departments the worms have reached their first moltings. Both in France and Italy the yellow races are more largely favored than ever. This is also true of the Levant.

Italy.—Fears are expressed in some districts that the hot season will overtake the fourth moltings, which would prove disastrous.

In the Neapolitan provinces there is great inequality; the worms have reached the first stage in some sections, the second period in others, while in others they are but incubating. This diversity is owing to the difference in temperature and to cold and rainy weather. Tuscany has been more favored, but the Venetian districts are as much behind as in France.

Spain.—In the Valence and Murcie districts the worms are at the second and third periods, and generally few complaints are heard, though the weather has been variable.

Broussa.—The silk harvest will be late this year, owing to the backward season; eggs in abundance everywhere and of Pasteurs seed.

Syria.—The majority of races are of Japan, though Var and Corsica contribute their share.

Greece.—The worms are at their first period.

Shanghai.—It is reported that vegetation has suffered from rains, and that mulberry leaves will be rare. This report needs confirmation.

As a whole, while the season has thus far been backward, no serious complaints have reached Lyons from any quarter, and the prospect may be considered fair.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, *May* 9, 1883.

PRODUCTION OF SILK GOODS IN LYONS.

REPORT BY CONSUL PEIXOTTO.

The total product of silk goods in the consular district of Lyons for the year 1882 was $71,759,000.

In 1881 the production reached $76,258,160, being superior by 6 per cent. or $4,498,830 over the past year.

The reduction has been in the manufacture of plain goods of pure silk and the waste of pure silk.

I beg to inclose a table showing the production for each year and specifying the nature of the articles manufactured, the amounts, the increase, and decrease.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, *March* 15, 1883.

The production of silk goods in the consular district of Lyons, in 1882, *compared with* 1881.

Description.	1881.	1882.	Increase.	Decrease.
PLAIN GOODS OF PURE SILK AND PURE SILK WASTE.				
Black silks (failles and taffetas, souples and cints)	$6,755,000	$3,860,000		$2,895,000
Colored silks (failles and taffetas)	2,316,000	1,544,000		772,000
Black and colored satins (all silk)	1,158,000	1,158,000		
Black and colored velvets (rayes)	482,500	96,500		386,000
Black and colored velvets (pure silk)	1,737,000	1,737,000		
Taffetas and serges for umbrellas and parasols	1,544,000	1,737,000	193,000	
Linings, serges, armures, marcelines, florenches, lustrenes, (black and colored)	1,930,000	1,930,000		
Handkerchiefs (unbleached, printed, and dyed)	3,860,000	3,474,000		386,000
Taffetas, striped or quadrille (cints and souples)	19,300	289,500	270,200	
Moire antique and Française (black and colored)	2,895,000	965,000		1,930,000

The production of silk goods in the consular district of Lyons, &c.—Continued.

Description.	1881.	1882.	Increase.	Decrease.
PLAIN GOODS OF PURE SILK AND PURE SILK WASTE—continued.				
Striped Pekins, satins of all kinds	$193, 000	$96, 500		$96, 500
Furniture and church stuffs	386, 000	386, 000		
Armures and surahs (black and colored) dress goods	7, 720, 000	10, 615, 100	$2, 895, 000	
Total	30, 995, 800	27, 888, 500	3, 358, 200	6, 465, 500
FANCY AND FIGURED GOODS OF PURE SILK.				
Figured and fancy stuffs (damas, armures, droguets, black and colored)	2, 895, 000	3, 860, 000	965, 000	
Furniture and church stuffs (dumas, lampas, &c.)	965, 000	1, 158, 000	193, 000	
Figured and fancy satins, moire antique (figured and colored)	772, 000	772, 000		
Fancy and figured goods for cravats, scarfs, &c.	386, 000	579, 000	193, 000	
Total	5, 018, 000	6, 369, 000	1, 351 000	
SILK GOODS MIXED WITH COTTON, WOOL, LINEN, &C.				
Black and colored satins	13, 510, 000	10, 615 000		2, 895, 000
Satins (dyed in the piece) for millinery and hats	5, 404, 000	6, 755 000	1, 351, 000	
Black and colored velvets (trame cotton)	1, 158, 000	1, 351, 000	193, 000	
Black and colored velvets (double width)	675, 500	772, 000	96, 500	
Plushes for milliners and hatters	1, 930, 000	1, 158, 000		772, 000
Velvets (figured, striped, &c.), cotton weft	579, 000	675, 500	96, 500	
Poplins, Sicilians, Bengalines, and other stuffs (wool filling)	115, 800	386, 000	270, 200	
Figured stuffs (warp wool)	772, 000	965, 000	193, 000	
Plain and figured stuffs for carriages	57, 900	57, 900		
Plain and figured stuffs for furniture and churches	386, 000	386, 000		
Printed satins	57, 900	386, 000	328, 100	
Turquoise, failles, serges, armures (mixed with cotton) for millinery trade	2, 026, 500	1, 930, 000		96, 500
Moussoul handkerchiefs (cotton warp)	579, 000	579, 000		
Armures, surahs (dyed)	579, 000	482, 500		96, 500
Stuffs of silk, waste silk, cotton, and thread mixtures	772, 000	772, 000		
Scarfs, shawls, fichus	104, 400	96, 500		57, 900
Figured stuffs for cravats (mixed)	193, 000	193, 000		
Umbrella silks (mixed)	965, 000	772, 000		193, 000
Pekins and striped satins (mixed)	96,500			96, 500
Total	30, 011, 500	28, 332, 400	2, 528, 300	4, 207, 400
SILK GOODS MIXED WITH GOLD OR SILVER FOR INDIA AND THE EAST.				
Plain and figured stuffs of pure silks and mixtures of silk and cotton and fine gold and silver	2, 084, 400	984, 300		1, 100, 100
MISCELLANEOUS.				
Crapes (black and colored)	1, 737, 000	1, 544, 000		193, 000
Crapes de Chine (China crapes)	154, 400	154, 400		
Gauzes	386, 000	386, 000		
Grenadines	965, 000	772, 000		193, 000
Tulles (plain, fancy, figures, and embroideries)	1, 158, 000	1, 158, 000		
Laces, gimps, lamas	582, 860	928, 330	345, 470	
Total	4, 983, 260	4, 942, 730	345, 470	386, 000
Church ornaments and military trimmings	965, 000	965, 000		
Trimmings of silk, and silk mixture with wool, cotton, &c	2, 200, 200	2, 277, 400	77, 200	
Total	3, 165, 200	3, 242, 400	77, 200	
Aggregate	76, 258, 160	71, 759, 330	7, 660, 170	12, 159, 000

Actual decrease, $4, 498, 830.

FALSIFICATION OF FRENCH WINES.

REPORT BY CONSUL WILSON, OF NANTES.

I have to acknowledge the receipt of dispatch, inclosing protests of the Chambers of Commerce of Bordeaux and Cette, in reference to the wine reports of this consulate.

I have had no reason to change the opinion expressed in the reports referred to in reference to the falsification of wines in France.

That the reports are necessarily imperfect in technical knowledge of the subject is doubtless true; this is already mentioned in a prefatory remark in one of them, but the main features, as stated therein, are believed to be substantially correct. In other words, the falsification of wine is carried on to a considerable extent in France, and a portion of the wine thus falsified is sent to the United States.

No better argument can be furnished of the existence of this practice than the establishment by the French Government, in the interest of public health, of the well-organized laboratories for the analysis of wines and other liquids, which are distributed throughout the principal towns of France. This step was not taken without due consideration. It was known and admitted that these falsifications were increasing to such an extent that something had to be done to protect the people, toward whom the French Government seldom ceased to exercise a parental relation. Many of the mixtures referred to were inoffensive, but some were not, and this justified the action of the Government in the determination to protect its citizens.

The French Government having taken this ground, it appears illogical on its part to complain of the United States Government for taking advisory measures looking to some similar action for the protection of the people of the United States, to whom a certain portion of falsified wine is exported. If this liquid is considered injurious to the French people it must necessarily be considered injurious to the American people.

For some years France has been laboring under the misfortune of constantly decreasing production in her vineyards the presence of phylloxera, and the demand at home and abroad has been greater than during the period of wine prosperity. The demand has been met by manufacturing what could not be grown. This product, the Bordeaux Chamber of Commerce urges in defense, is not injurious, and it probably is not in most cases, but the central fact remains that it is manufactured chiefly through mixtures and the addition of substances foreign to the vine. It is not the natural wine which it is generally represented to be, and a certain percentage of it is injurious, as has been proved by the authorized laboratories of France.

While France as a friendly power is entitled, in the unfortunate and disastrous failure of her wine crops, to the sympathy of the United States, the primal duty of the latter is to take such measures as are dictated by prudential regard for the welfare of its own citizens.

ALBERT RHODES,
Consul.

UNITED STATES CONSULATE,
Rouen, April 18, 1883.

THE RAILROADS OF VENEZUELA.

REPORT BY CONSUL BEACH, OF PUERTO CABELLO.

The first railroad built and operated in Venezuela began at Puerto Cabello and led to the westward, along the strip of land between the Bay of Trieste (the bay is an extension of the Caribbean Sea) and one of the Andean ranges, which varies from 1 mile to 2 miles in width. This strip of land is a joint formation produced by a wash-down from the mountains and a wash-up from the sea, and is nearly dead level. When the road was projected it was with the intention and expectation that it would be extended for a distance of about 70 miles, and in its course to reach one or two interior cities. From the levelness of the route and the sandy character of the soil the work of grading was neither difficult nor expensive. About 10 miles of the road was put into operation, and kept in operation for a few months. Financial embarrassment followed; the cars stopped running; the rails were taken up and shipped away, and now nothing visible remains of the enterprise but an outline view of the nearly jungle-overgrown road-bed.

Tucacas is about 30 miles to the westward of Puerto Cabello. From Tucacas to the mines of Aroa, where copper mining is prosecuted, the course is southwesterly, and distance 55½ miles. Between these places an English company, about the year 1870, built a 2-feet gauge railroad, mainly for use in connection with mining. The topography of the country permitted the road to be built in almost an air line, it having but few slight divergencies. The obstacles met with in its construction were many, and some very formidable. For a large portion of the way there were trees of great size, and a dense jungle from 20 to 30 feet in height. From the nature of the obstacles it became necessary that the building and surveying of the road should be conducted in conjunction, and the line of the road was sometimes determined by the compass following those who cleared a place for the track. A great deal of malaria abounded; poisonous reptiles were frequently met with, and tigers and other wild animals were quite numerous. The fertile soil was full of roots, rendering the grading of the road a very great labor. A few small streams were crossed, the largest requiring a bridge of 90 feet span. The bridges are iron structures, the railroad ties are of iron, and even the telegraph poles along the line are of the same material. The road appears to be substantially constructed, and the cars run very smoothly. For 23 miles from Tucacas the grade of the road has made an ascent of 150 feet. Near the western terminus of the road the mountain is approached, and at the distance of 50 miles from Tucacas the elevation is 700 feet. The road for its last 5 miles has an upward grade of 600 feet, requiring especially constructed engines for the movement of trains. There are nine stations on the road—all mere stations, except Tucacas, the starting-point, with a population of 1,200, and La Luz, the practical terminus for general business, 50½ miles from Tucacas, a village having a population of about 3,000. The freight cars of the road carry from 5 to 6 tons, and the passenger cars about 30 passengers. Of late years the road has, in addition to the copper ore, freighted considerable coffee and other general merchandise of the country, coming mainly from Barquisimeto, a city of 29,000 population, 60 miles beyond La Luz, with which it is connected by a coach and cart road. The passenger business of the road is very light.

A railroad from La Guira to Caracas has been in process of construction for several years. The distance by a foot-path over the intervening mountain is 8 miles, but by the necessarily circuitous route of the railroad line it is 22 miles. Caracas is 2,600 feet above the sea at Laguira; but in passing over the lowest point of the intermediate mountain an altitude of 3,000 feet is attained, from which there is a descent both ways. The track of the road is 3½ feet gauge. The grade over the mountain is uniform 3½ per cent. The road is built on a series of reverse curves, having a radius of 140 feet. Caracas is directly south of La Guira. In starting from La Guira the course of the road is westward, but it circles around to the southward in ascending the mountain, and the whole forms a large semi-circle as it reaches its southern terminus. In building the road work was begun at La Guira, and has been progressed from that point. The northern end of the road has been completed for over a year, and is utilized for the transportation of material used in its construction. In recently riding over the coach road between the cities named, which for much of the way is near the railroad line, I was enabled to observe the work as fully completed and as incomplete. Great scientific skill has been displayed in the engineering; the work is well executed; and, judging from the large force of men employed, the road will doubtless be in running order its entire length by the 1st of July next, the time of opening fixed by its managers, and which is the time set for opening the international exhibition at Caracas—both openings to be celebrated in conjunction. For a considerable part of the way the road passes along the precipitous sides of the mountain, having a surface of earth and shale rock, which is liable to be carried in large quantities on to the track by heavy rain showers, and which will be the greatest obstacle the operating of the road will have to contend against.

Surveys have been made for other railroad lines, and a small amount of grading has been done on a proposed road between Puerto Cabello and Valencia, distance about 40 miles, with intermediate mountain elevation of 1,800 feet.

HORATIO N. BEACH,
Consul.

UNITED STATES CONSULATE,
Puerto Cabello, Venezula, February 8, 1883.

RESUMPTION OF SPECIE PAYMENTS IN ITALY.

REPORT BY CONSUL DUNCAN, OF NAPLES.

It has now been a week since specie payments were resumed in Italy, and thus far everything has gone on as smoothly and regularly as if no change had taken place.

The 12th instant was the day fixed upon by the Government for resumption, and all preparation made accordingly. There was not, like with us in the United States, actual resumption some time beforehand; on the contrary, just before that date there was considerable stringency in the money market, and many shrewd business men entertained doubts as to the Government being able to resume, or, if it did, to maintain resumption. The Government, too, seemed to have had some misgivings, for it made such stringent and vexatious regulations for the exchange of specie for paper that leading bankers prefer going on the market and paying a premium of one-fifth to one-fourth per cent. rather than submit to the delay and annoyances. For instance, the treasury offices are kept open but a short time daily; so your turn may not come if there be a crowd. With the bills presented for exchange you must also present an invoice with their numbers; then, if the amount required is over 50,000 lire two days' notice must be given. If it is less than 100 lire it is paid in silver, and if over 100 lire two-thirds in gold and one-third in silver. But people do not fancy the silver. These regulations were, no doubt, made with a view of obstructing a rush on the treasury officers during the first days of resumption, and it has had the desired effect, for neither here at Naples nor elsewhere in Italy has there been any trouble in this respect.

Thus specie payments have been resumed in Italy without any excitement or disturbance to business. As to whether or not they can be maintained by the Government there is some question in business circles, but if the peace of Europe is not disturbed I do not apprehend any difficulty. Italian finances are certainly not in what can be called a brilliant condition, but they have steadily improved from a deficit of 200,000,000 to 300,000,000 lire annually to a slight annual surplus; so that the Government has already been enabled to abolish some of the more oppressive taxes, such as the grist tax; besides, the exportations from Italy, as compared with the importations, are largely on the increase, so that the tendency to drain specie from the country will not be so great as heretofore.

As is well known, the Government obtained specie with which to resume by means of a loan in England and Germany of 640,000,000 lire, for which it has to pay 5 per cent. interest.

Small bills under 5 lire are to be withdrawn and canceled, and silver take their places; but as yet no change is perceptible in the small currency in daily use, and I have not yet seen a single silver lire as the result of the change.

B. O. DUNCAN,
Consul.

UNITED STATES CONSULATE,
Naples, April 19, 1883.

FOREIGN COMMERCE OF SERVIA.

REPORT BY CONSUL-GENERAL SCHUYLER.

Area and population.—Servia before the treaty of Berlin of 1878 had an area of 14,605 square miles, and a population of about 1,337,000. The new districts added by the treaty of Berlin gave an increase of area of 4,195 square miles and about 303,000 population. The total area now is therefore 18,800 square miles, and the population at the end of 1881 was estimated at 1,760,000.

Government.—The government of the Kingdom being strictly constitutional gives all the necessary guarantees for the maintenance of good order, and the execution of justice. There is a national legislative assembly called the *Skuptschina* composed of one chamber only, three-fourths of the members being elected by the people, and the remaining fourth being appointed by the King. There are regular courts of justice, and the jurisprudence, both civil and criminal, is based partly on Austrian and partly on French models. By commercial and consular treaties lately concluded, citizens of the United States have in Servia all the rights and privileges enjoyed by subjects of other powers.

Foreign trade.—Owing to its peculiar position, the foreign trade of Servia has been up to the present chiefly in Austrian hands. A very small portion goes southward through European Turkey towards Salonica, somewhat more from Nisch and Pirot towards Bulgaria. The wines of the district of Negotin, which is separated from the rest of Servia by a range of mountains, can be shipped down the Danube without passing through Austrian territory, but the great majority of the articles exported and imported pass through the towns on the Save and the Danube, and are carried by Austro-Hungarian steamers. The completion of the railway from Pest to Belgrade will enable foreign goods to be sent to Servia with more speed and ease, as they will not necessarily be transshipped in Austrian territory. When the Servian railway now building is connected with the Turkish lines to Salonica, a large portion of Servian trade will probably be diverted to this channel as necessitating a shorter land carriage.

Servian statistics are very far behind in point of years, and even those are not strictly accurate. From the following tables it will be possible to obtain an approximate idea of the foreign trade of Servia for the years 1871 to 1875. The years given are the fiscal years beginning on the 1st to 13th of November.

Exports from Serbia, 1871-'75.

Articles.	1870-'71.	1871-'72.	1872-'73.	1873-'74.	1874-'75.
Grain	$511,951	$190,226	$416,543	$1,008,710	$605,549
Pigs	2,233,154	2,941,909	2,460,964	2,310,448	3,269,263
Other cattle	1,051,156	1,478,640	1,577,632	1,465,819	1,036,431
Wine and liquors	76,624	148,979	190,680	219,252	91,926
Dried plums	146,377	232,807	490,877	457,336	651,245
Tobacco	11,988	8,215	15,009	23,370	37,949
Staves	16,483	22,837	58,393	40,704	48.701
Oak galls	128,160	126,352	25,241	85,575	69,028
Wood, timber, vegetables, and other vegetable products	49,493	55,083	64,275	81,553	55,192
Wool	198,832	195.409	132,250	100,130	91,377
Hides, skins, &c	547,991	608 498	392,230	650,603	454,177
Grease and tallow	68,397	52,285	33,810	15,801	50,364
Other animal products	82,576	65,464	54,316	44,333	37,608
Ores, minerals, &c	98,387	105,642	101,971	198,489	137,977
Manufactures and miscellaneous	110,472	108,592	105,623	126,921	120,247
Total	5.333,041	6,340,936	6,119,814	6,829,044	6,757,025

Of this about 84 per cent. was sent to or through Austria-Hungary, 14 per cent. via Turkey, and 2 per cent. via Roumania. The quantities of the chief articles of export were as follows:

Articles.	1870-'71.	1871-'72.	1872-'73.	1873-'74.	1874-'75.
Grain ... bushels	610,189	173,800	430,779	1,293,412	924.509
Pigs ... head	309,065	472,602	295,525	265,340	374.092
Other cattle ... do	80,374	148,580	138,644	118,462	106,034
Wines and liquors ... pounds	3,041,038	6.405,666	7,244,173	6,795,430	2,757,884
Plums dried ... do	4,101,517	6,341,936	12,140,873	9,072,054	15,501,400
Tobacco ... do	74,770	58,038	94,438	132 765	265.402
Staves ... pieces	362,565	604,595	1,491,398	836,832	1,261,701
Oak galls ... pounds	6,707,538	6,307,063	1,173,642	2,874,437	1,736,845
Wool ... do	1,128,668	1,065,732	678,090	506,253	465,570

Imports into Serbia, 1871–'75.

Articles.	1870–'71.	1871–'72.	1872–'73.	1873–'74.	1874–'75.
Grain	$170, 467	$777, 217	$618, 221	$131, 142	$87, 834
Cattle and horses	431, 154	454, 107	448, 536	521, 307	261, 400
Wines and liquors	131, 600	97, 387	105, 719	45, 458	68, 882
Coffee	139, 521	150, 970	129, 931	221, 232	205, 347
Sugar	437, 147	395, 333	397, 476	423, 743	419, 917
Vegetable oils	127, 903	181, 037	114, 634	210, 478	173, 172
Tobacco	46, 954	40, 221	51, 597	54, 212	77, 816
Cotton	26, 406	22, 312	18, 947	26, 529	24, 779
Rice	53, 094	68, 355	55, 569	117,805	110, 952
Timber, wood, &c	98, 530	108, 258	117, 204	132, 234	134, 812
Other vegetable products, dyes, spices, drugs, fruits, nuts, &c	160, 739	181, 518	171, 836	223, 754	200, 087
Hides and skins, raw	114, 433	85, 739	60, 028	139, 926	139, 184
Hides and skins, worked	314, 924	249, 831	215, 381	257, 618	278, 556
Fish, fresh, dry, and salt	104, 431	147, 590	105. 768	163, 254	134, 420
Candles	45, 945	59, 394	38, 552	77, 484	73, 869
Lard, tallow, &c	2, 201	22, 182	19, 130	44, 206	17, 457
Other animal products	57, 109	97, 128	60, 609	91, 993	18, 321
Petroleum	43, 531	45, 850	59, 214	82, 531	79, 666
Salt	357, 805	259, 566	414, 676	382, 155	457, 096
Copper	71, 807	54, 103	57, 893	57, 902	61, 376
Pig iron	81, 108	61, 205	64, 175	89, 367	93, 243
Other metals & minerals	99, 780	82, 459	90, 660	124, 734	115, 968
Manufactures:					
Iron manufactures	363, 742	245, 987	232, 036	265, 011	244, 316
Glass-ware and porcelain	86, 500	93, 508	68, 923	98, 759	92, 600
Paper	54, 242	54, 581	48, 229	67, 913	74, 750
Clothes	41, 659	36, 935	22, 657	28, 941	27, 748
Hats, caps, &c	158, 561	153, 361	132, 700	181, 232	169, 464
Boots, shoes &c	53, 137	41, 918	37, 575	39, 524	48, 749
Woolen yarn	87, 800	42, 191	72, 214	137, 987	161, 442
Cotton, yarn, &c	272, 909	242, 660	227, 168	334, 509	342, 344
Clothes, stuffs, woven goods of wool, silk, cotton, flax, &c	746, 916	757, 325	581, 293	930, 591	960, 239
Other manufactures	547, 660	754, 676	572, 590	601, 368	699, 571
Total	2, 403, 126	2, 420, 142	1, 895, 385	2, 685, 835	2, 821, 223

About 78 per cent. was imported via Austria-Hungary. About 15½ per cent. was imported via Turkey. About 6½ per cent. was imported via Roumania. The quantities of some of the chief imports were as follows:

Articles.		1870–'71.	1871–'72.	1872–'73.	1873–'74.	1874–'75.
Grain	bushels	133, 486	644, 456	553, 822	110, 360	67,507
Cattle	head	26, 056	34, 849	28, 417	56, 239	26, 311
Wines and liquors	bottles	295	467	397	392	1, 093
Do	gallons	974, 284	657, 492	662, 588	312, 180	492, 409
Beer	bottles	9, 489	2, 606	1, 450	....	....
Do	gallons	307, 372	178, 503	157, 781	94, 705	113, 165
Sugar	pounds	4, 003, 257	3, 677, 833	4, 247, 765	4, 482, 786	4, 255, 969
Salt	do	29, 332, 534	30, 525, 828	50, 214, 550	32, 747, 676	37, 525, 079
Petroleum	gallons	102, 420	107, 586	147, 512	205, 792	435, 307

The transit trade through Serbia was:

1870-1871	$1, 413, 876
1871-1872	1, 449, 851
1872-1873	1, 173, 388
1873-1874	1, 496, 101
1874-1875	1, 191, 570

Ninety-eight per cent. of this was between Austria-Hungary and Turkey.

IMPORTS AND EXPORTS FOR 1880.

Recent Servian official statistics give the foreign commerce of Servia for 1880 as follows:

IMPORTS.

Whence.	Value.
Austria-Hungary	$7,630,380
England	1,201,443
America	512,635
Italy	392,056
Roumania	327,463
Germany	317,364
Turkey	264,563
Bulgaria	251,255
Switzerland	167,428
Bosnia	85,620
France	68,556
Spain	485
Total	11,219,248

EXPORTS.

Whither.	Value.
Austria-Hungary	$4,875,241
Bulgaria	546,400
Bosnia	329,396
Turkey	274,032
France	258.608
Roumania	53,432
Total	$6,337,109

The transit trade in 1880 amounted to $300,975.

Trade with Austria-Hungary.—According to Hungarian published statistics, the exports of Servia, from July to December, 1881 (six months), to Austria-Hungary amounted to $3,171,000, and the imports from Austria-Hungary in the same time to $1,902,000.

Customs receipts.—The amount received for customs duties for the fiscal year from November 1, 1880, to October 31, 1881, was $1,009,498, of which $486,649 came from Belgrade. For the six months from November 1, 1881, to April 30, 1882, the total receipts of customs duties in Servia were $478,803.[*]

Export of hogs.—It will be seen, even from these scattered figures, that the chief articles of exportation from Servia are live animals and dried plums. Among animals, pigs have the first place. The total exportation of pigs in the budgetary year, from November 1, 1880, to October 31, 1881, was 302,008 head. The export duties upon these amounted to 76,125 francs ($15,225). Even by the new arrangements with Austria-Hungary, a heavy duty is imposed upon live animals, being 4 florins per head upon cattle, and 1½ florins per head on pigs.

---

[*] *Note by Consul-General Schuyler to report on the foreign commerce of Serbia.*—Information received subsequently to the completion of this report shows the total customs receipts for the fiscal year ending October 31, 1882, as $1,144,835. Of this amount $5,134 came from the trade over the Drina, *i. e.*, the direct trade with Bosnia; $74,245 from the land traffic with Bulgaria, and Macedonia; $147,835 from the trade on the Save; and the remainder, $917,621, from the Danube ports; these two items, with the exception of the small amount of imports received at the ports below the Iron Gates, being exclusively the trade with and through Austria-Hungary.

The customs receipts of this year exceed the estimates in the budget by $304,835.

The amount of customs duties received in the first quarter of the present year—November, December, 1882—January, 1883, is $250,824.

EUGENE SCHUYLER.

APRIL 7, 1883.

This makes, at the average value, about 7 per cent. ad valorem on cattle and 7½ per cent. ad valorem on pigs. The chief foreign market for Servian pigs, as also for those of Roumania and Bulgaria, is in Hungary, and there two central markets have been founded at Steinbruck and Oedenburg. The conditions of the trade, however, are not good for the Servians. The sanitary regulations are very severe, and, at any time when the Government of Austria-Hungary wishes to put pressure upon Servia, are enforced with extreme rigor. Sometimes the importation into Hungary is entirely prohibited. For this sanitary reasons are sometimes only the pretext. In addition to this, after the pigs have been driven to Oedenburg for sale no buyers are found, but many Jewish merchants and middlemen offer to sell corn for the nourishment of the animals until purchasers can be found. Owing to these proceedings, the proprietor of the pigs frequently finds himself with a very small profit, if, indeed, he does not sell at a loss.

Evidently a saving could be made to the Servian stock raisers if the pigs were exported in the form of cured meat, and for that purpose a concession was granted some months ago to an American for erecting an establishment in Servia for curing pork and hams on the American system. The conditions were advantageous, but the company has not yet gone into operation.

Export of plums to the United States.—The export of dried plums, as will be seen from the tables, amounted in 1871 to $146,377; in 1872 to $232,807; in 1873 to $490,877; in 1874 to $457,336, and in 1875 to $651,245. In 1879 the value of dried plums exported, according to the English vice-consul at Nish, was only $190,450. In 1880 over 10,500,000 pounds were exported, of a value of over $537,000.

A very great portion of the plum crop of Servia, generally at least half, and frequently much more, goes to the United States. The prunes are, however, sold to middlemen in Buda-Pesth or Trieste, sometimes even in Hamburg and Amsterdam, and thus do not appear as coming from Servia. According to the returns of our consul-general at Vienna, I find that the amount of dried fruit, chiefly plums, sent to the United States from Buda-Pesth and Trieste together, amounted in the year ending September 30, 1880, to $1,278,016; in the year ending September 30, 1881, to $1,013,068, and for half of the next year to $638,822. Of course a good portion of this came from Bosnia, Herzegovina, and Slavonia; but we may safely assume from these figures that the value of Servian plums sent to the United States is not far from a million of dollars annually. Mr. Milanovitch, one of the large plum-dealers in Belgrade, assures me that he has himself sent to America in one year as many as 2,250,000 pounds, worth on the average about $80,000. Generally the prunes are roughly dried and packed in casks or mats; but two or three dealers have lately undertaken to dry the plums by artificial heat, as in France, and export them in neat boxes, so that, while being superior in quality, they present a better appearance and bring a higher price. The plums in Servia are of an excellent quality, and if orders could be sent directly to Belgrade, not only could a better class of prunes be obtained, but they could be put upon the market in New York more cheaply than at present. The best route for such shipments at present would be up the Save from Belgrade to Sissek, and then by railway to Fiume (113 miles), or to Trieste (210 miles), preferably the former.

Grain trade.—The export of grain from Servia is not large, but will probably increase with the facility of communications. The exports in

1880 were: wheat 1,168,565 bushels, rye 62,257 bushels, maize 1,029 bushels, barley and oats 112,525 bushels; and in 1881, wheat 989,354 bushels, rye 55,279 bushels, maize 14,784 bushels, barley and oats 143,157 bushels.

Export of skins.—The export of skins will probably form an important branch of trade. At present there are exported annually about 25,000 sheep skins, chiefly to Hungary, for the winter coats of the peasantry, very great quantities being used at home for similar purposes; 400,000 lamb skins, chiefly to Austria and Germany, for glove-leather; 200,000 goat skins and 300,000 kid skins. The Servian goat and kid skins are very excellent in quality, and considered superior to those of Greece and Macedonia. Bullock hides are rarely exported; but, on the contrary, are imported from South America and India by way of Hamburg and Trieste. All the native and imported hides are consumed in the manufacture of *opankas*, or hide-sandals, worn by the peasantry.

Export of wine.—The export of wine from Servia is constantly increasing, as the wines are of good quality, and are found suitable for use in France in mixing with other wines for the fabrication of well-known brands. At the wine exhibition in Bordeaux last autumn, fifty-eight specimens of Serbian wines were exhibited and received seventeen prizes, of which two were gold medals, six silver medals, four bronze and six honorable mentions. Of the wines exhibited, thirty-nine specimens were red, receiving twelve prizes; and nineteen white, receiving five prizes. The comparison of the number of prizes with those taken by other countries at this exhibition is interesting, though it is impossible to obtain the exact significance without knowing the extent of the competition. Germany, with Alsace, took thirteen prizes. Russia one, Bulgaria four, Roumania one, Switzerland one, the Netherlands one, Turkey four, Eastern Roumelia six.

Imports of petroleum.—The only article imported from the United States, to the best of my knowledge, is petroleum. The import of this, according to the table previously given, was, in 1871, 102,420 gallons; in 1872, 107,586 gallons; in 1873, 147,512 gallons; in 1874, 205,792 gallons; in 1875, 435,307 gallons. The imports from America in 1880 were $512,635, which is presumably all petroleum. We learn also from the Austrian official statistics that the import of petroleum into Servia in 1881, by the Danube Steam Navigation Company, was about 531,165 gallons. Very little of this could have come either from Roumania or Austria, as on account of the cost of production these could not compete in price. Some deposits of petroleum shale have now been discovered in Servia, and it is possible that in a few years they will be made productive. As yet, no attempt has been made to work them.

Import of salt.—All the salt used in Servia is imported. Formerly the greater portion came from Roumania. Now a salt monopoly has been established by the Government, and the company which has taken the contract is bound to import a certain proportion from Austria-Hungary as well as from Roumania. Both in Austria and in Roumania the price of salt for export is less than of that sold in the country, and the result is that salt imported into Servia was often smuggled into Austria-Hungary, by boats, across the Danube and Save. This traffic, which the Austro-Hungarian Government has long complained of, can now probably be stopped. I may say here that the vexatious customs regulations along the Save and the Danube, as well as the equally obnoxious passport system, cause great harm to trade, and even to the local frontier traffic.

Manufactured goods used in Servia are chiefly of Austrian origin, but he English are gradually obtaining a foothold, and this it is expected they will improve when the railway connection is finished to Salonica. By their commercial treaty the English obtained certain diminutions of duty on manufactured goods, which, however, under the most-favored nation-clause, are equally applicable to the goods of the United States.

The importation of vines, fruits, and vegetables into Serbia is now placed under certain restrictions to prevent phylloxera.

OBSTACLES TO BUSINESS.

One obstacle to business enterprises in Servia is the absence of banks. A law has just been passed authorizing the creation of a National Bank of Servia, with a capital of $4,000,000, with its seat at Belgrade and a branch at Nish. The bank will have the exclusive right of issuing bank notes, and will carry on all ordinary banking business. It will be established by foreign capital.

Both postal and telegraphic communications are good. There are fifty-nine telegraphic stations in Servia, eleven of which are open day and night. The internal rate is a franc for twenty-five words. The telegraphs are managed economically, and yield a considerable revenue. In the year 1880 this amounted to over $45,000.

EUGENE SCHUYLER.

UNITED STATES CONSULATE GENERAL,
Athens, *March* 29, 1883.

MANUFACTURE OF CAMPHOR IN JAPAN.

REPORT BY CONSUL JONES, OF NAGASAKI.

The manufacture of camphor is an important industry on the island of Kiu Shiu (Kew Shew).

From the port of Nagasaki there were exported, in the year 1882, 15,186.18 piculs, valued at $277,792. A picul is 133⅓ pounds. From other ports of the island, not yet open to foreign trade, a large quantity was shipped by native merchants in native vessels to Shanghai in China, and Hong Kong, whence it finds its way to India and England; little or none of it is exported to the United States. The camphor tree grows abundantly all over this portion of Japan. It is found alike on high elevations and in the valleys and lowlands. It is a hardy, vigorous, long-lived tree, and flourishes in all situations.

Many of these trees attain an enormous size. There are a number in the vicinity of Nagasaki which measure 10 and 12 feet in diameter. The ancient temple of Osuwa at Nagasaki is situated in a magnificent grove of many hundred grand old camphor trees, which are of great age and size, and are still beautiful and vigorous. I am told that there are trees at other places in Kiu Shiu measuring as much as 20 feet in diameter. The body or trunk of the tree usually runs up 20 and 30 feet without limbs, then branching out in all directions, forming a well proportioned, beautiful tree, evergreen and very ornamental.

The leaf is small, elliptical in shape, slightly serrated, and of a vivid dark green color all the year round, except for a week or two in the early spring, when the young leaves are of a delicate tender green. The seed or berry grows in clusters and resembles black currants in size and appearance. The wood is used for many purposes, its fine

7 JUL 83

grain rendering it especially valuable for cabinet work, while it is used also for ship-building. The roots make excellent knees for ships.

I have sent many seeds of the camphor tree to the United States, in the hope of adding to our own arboriculture.

In the manufacture of camphor the tree is necessarily destroyed, but, by a stringent law of the land, another is planted in its stead. The simple method of manufacture employed by the natives is as follows:

The tree is felled to the earth and cut into small pieces, or, more properly speaking, into chips.

A large metal pot is partially filled with water and placed over a slow fire. A wooden tub is fitted to the top of the pot and the chips of camphor wood are placed in this. The bottom of the tub is perforated, so as to permit the steam to pass up among the chips.

A steam-tight cover is fitted on the tub. From this tub a bamboo pipe leads to another tub, through which the inclosed steam, the generated camphor, and oil flow. This second tub is connected in like manner with a third.

The third tub is divided into two compartments, one above the other, the dividing floor being perforated with small holes, to allow the water and oil to pass to the lower compartment. The upper compartment is supplied with a layer of straw, which catches and holds the camphor in crystal in deposit as it passes to the cooling process. The camphor is then separated from the straw, packed in wooden tubs of 133⅓ pounds each, and is ready for market.

After each boiling the water runs off through a faucet, leaving the oil, which is used by the natives for illuminating and other purposes.

A. C. JONES,
Consul.

UNITED STATES CONSULATE,
Nagasaki, Japan, March 26, 1883.

COMMERCE AND PRODUCTS OF SAMOA.

REPORT BY THEODORE CANISIUS, CONSUL.

AMERICAN VS. BRITISH AND GERMAN TRADE.

In order to obtain accurate information concerning the commerce and shipping of Great Britain and Germany with Apia, I had of necessity to defer sending a yearly report, for, without making a statement of the mercantile doings of these two countries in this part of the world, a commercial report embracing only those of America during the consular year would be a very meager and uninteresting affair. Both the British and German consuls send to their Governments only at the end of the year a general commercial report, so that, by comparing the abstracts of the statistical statements of their consulates with those of mine, the difference in the commercial activity of the three countries can be seen at a glance; and as both the British and the German consuls very kindly furnished this office with short statements of the shipping, imports, and exports of their respective countries during the year 1882, I subjoin them.

The statistical report which I attach, referring to American shipping and import trade to Apia, does not compare unfavorably with the British. The tonnage of American vessels which arrived here during 188 was 691 tons less than the British, but the value of merchandise brought here from the United States by American vessels is greater by $43,946 than the entire British imports directly in British ships, as will be seen from the subjoined statements:

American shipping and imports during 1882.

Name of vessel.	Class of vessel.	Tonnage.	Cargo inward.	Invoice value of cargo.	Date of arrival of ship.	Date of departure of ship.	Cargo outward.	Cleared for.
Takaofo*	Sch.	22. 61	Copra	....	Jan. 4	Jan. 7	Ballast	Quiras.
Takaofo	Sch.	22 61	Cotton	....	Feb. 5	Feb 19	Ballast	Mulifanua.
Fremont	Bark.	345. 57	General	$24, 000	Feb. 24	Mar. 13	Ballast	San Francisco.
Takaofo	Sch.	22. 61	Copra	....	Feb. 21	Mar. 5	Ballast	Mulifanua.
Takaofo	Sch.	22. 61	Copra	....	Mar. 10	Mar. 16	Wood	Tonga Islands.
Pannonia	Sch.	196. 19	General	17, 000	Apr. 26	May 2	Ballast	Fiji Islands.
Takaofo	Sch.	22. 61	Copra	....	May 13	....	....	
Seaver	Bark.	229. 70	General	10, 000	May 14	May 26	Ballast	Tahiti.
Sheet Anchor	Brig.	221. 81	General	9, 743	June 5	June 26	Ballast	Fiji Islands,
Amethyst	Bark.	356. 20	General	23, 622	Aug. 27	Sept. 13	Cocoa nuts, bêche de mer.	San Francisco.
Sheet Anchor	Brig.	221. 81	General	5, 000	Sep. 11	Sept. 21	Copra	San Francisco.
Seaver	Bark.	229. 70	General	20, 312	Nov. 26	Dec. 8	Copra	San Francisco.
Total	....	1, 914. 03	....	109, 677				

* The schooner Takaofo has been sold to the German factory here.

BRITISH SHIPPING AND COMMERCE DURING 1882.

Arrived: 21 vessels, of 2,565 tons; landed goods of invoice value of £13,525; one man-of-war, 12 guns, 200 men, and one yacht of 100 tons.

Sailed: 20 vessels, of 2,546 tons, with Samoan produce to the value of £320; one man-of-war, 12 guns, 200 men, and one yacht of 100 tons.

German shipping and commerce during 1882.

Arrival of ships for German account.	Number.	Tonnage.	Invoice value of imported goods.	Value of exported produce.
Under German flag	110	20, 556. 03	$126, 629	$685, 369 70
Under English flag	7	400. 00	26, 686	
Under American flag	7	814. 82	47, 622	
Under Norwegian flag	4	1, 913. 00	....	
	128	23, 683. 85	200, 937	685, 369 70

REMARKS.—From Samoa, $240,584.70; from other South Sea islands, $444,785; total, $685,369.70. Value of imported goods exported from Apia to other South Sea islands, $106,684.

MEN-OF-WAR.

January to May, Moerve, 848 depl. tons, 4 guns of 12^{cm}, 868 horse-power, 120 men.
May to November, Carola, 2,170 depl. tons, 8 guns of 15^{cm}, 2 guns of 8^{cm}, 2,100 horse-power, 230 men.
November, Hyacue, 489 depl. tons, 2 guns of 12^{cm}, 2 guns of 8^{cm}, 350 horse-power, 77 men.

GERMAN PREDOMINANCE ON THE SOUTH SEAS.

By the above statements it will be seen that the commerce of the South Seas is almost entirely in the hands of the Germans, and is becoming each year more so. The reason of this is that the German Government fosters it to the utmost extent; their ships of war constantly cruise among the various groups of islands, demonstrating that it is protecting its subjects in good earnest and will punish severely any one who injures them in any way. The consequence of this policy is that the Germans have monopolized the trade of nearly all the island groups, including the Marshall, Caroline, Gilbert, Ellice, Phœnix, Union, Tonga, and also the Samoan, where they have their principal depot and whence they carry on the trade to the other islands. As I before stated, the German Government has generally one or more ships-of-war stationed in this harbor to keep the natives in order. Their greatest dread is the men-of war, and the nation that sends the most to their islands is in their estimation the most powerful, and therefore the one to be most respected. The only way to establish commerce in countries inhabited by savages or semi-civilized races is to protect those who undertake the enterprising task in their lives and property. German merchants feel that they are the best protected, consequently the vast trade which they have succeeded in building up in the Pacific.

The commercial importance of this group is not generally well known in the United States, therefore a little information concerning its productive capabilities should be interesting to our exporters and importers. The immense fertility of these islands allows of the successful cultivation of nearly every tropical production. Coffee, sugar, and tobacco could be produced with special success, while the vast number of cocoa-nut trees growing here supply an unlimited quantity of the valuable oil obtained from the meat of the nuts.

Although comparatively near to our shores, I regret to say that our trade with Samoa is insignificant when compared to that of the far-distant Germany. A voyage for a sailing vessel between here and the latter requires generally 125 to 150 days, and the former only 30 to 35. When we take into consideration the value of the products of these truly lovely islands, and the amount of merchandise, which is being yearly augmented, required by their half-civilized inhabitants, it is to be wondered that our commercial men overlook the importance to which they (the islands) would surely rise were American enterprise directed more to them. There is noticeable an improvement in this regard in Apia, it is true, but not so in any of the other islands. Two San Francisco houses have established themselves at this port, and I believe are doing very well; they are Greosmühl, Moors & Crowford, and Whightman & Kustel, both of which are making considerable inroads into the trade of the two great German firms here.

The exports from the different groups under my consular jurisdiction consist in copra, which is, of course, the principal article, cotton, cotton-seed, candle-nuts, cocoa-nut fiber, and pearl and tortoise shells. One of the American firms here export to San Francisco a considerable quantity of pearl shells from the Marshall and Caroline Islands, and have recently begun to ship many tons of copra to that city. There is a good prospect that this trade will soon develop into a very extensive one, for our soap manufacturers are beginning to learn that cocoa-nut oil is much superior for making fine toilet soaps to any other known oily substance. The French know this well, and consequently large quantities of copra are sent to the Marseilles market. If San Francisco merchants would engage in this copra trade more than at present, the French will not in future have so good a market for their toilet soaps in the United States as they have had heretofore, and the thousands of dollars which are yearly paid by the Americans to France for this article would be retained at home.

I have in my possession some statistical statements of the German Empire, which throw considerable light upon the South Sea trade of the Germans. I subjoin some of them, although the latest are for the year 1877. They may prove interesting to some of our merchants on the Pacific coast, and stimulate them to interest themselves more than hitherto in this valuable trade.

THEODORE CANISIUS,
Consul.

UNITED STATES CONSULATE,
Apia, December 31, 1882.

Foreign commerce of Samoa.

Years.	Imports.		Exports.		Number of ships.	
	Total value.	German.	Total value:	German.	Total.	German.
1868	$166,000	....	$190,000	....	65	24
1869	179,960	....	162,000	....	56	22
1870	214,000	....	128,000	....	70	28
1873	317,000	....	288,000	$277,500	75	21
1874	271,500	$236,500	440,000	415,000	57	36
1875	405,200	345,200	501,250	436,250	97	50
1876	401,500	322,500	641,500	596,500	149	87
1877	396,855	311,855	625,850	554,200	136	65

Imports into the Samoan and Tonga Islands in the years 1876 and 1877.

Articles.	Invoice value at Apia.	
	1876.	1877.
Manufactured goods	$93,500	$106,250
Hardware	15,600	19,500
Arms and ammunition	4,000	11,025
Fancy goods	30,900	34,250
Provisions	55,200	50,025
Liquors	19,200	25,500
Drugs and chemicals	1,000	2,300
Wood and other building materials	25,000	29,580
Ships' stores	33,300	34,125
Tobacco and cigars	29,000	16,300
Horses and other animals	14,100	4,750
Machinery	2,300	800
Coin	68,000	55,000
Total	401,500	396,855
Through German importers	322,500	311,855
Through other nations	79,000	85,000

Exports from the Samoa and Tonga and other groups.

Articles.	Value 1876.	Articles.	Value 1877.
Copra ([illegible] tons)	$570,000	Copra (8,280 tons), to which come 1,700 tons shipped by German houses in Fiji to Europe.	$536,250
Cotton, ginned (375,000 pounds)	60,000		
Other produce	11,500		
		Cotton, ginned, 360,000 pounds	57,600
Total	641,500	Other produce	32,000
Exported by German houses	$596,500	Total	625,850
Other nations	45,000		
		Exported by German houses	554,200
		Other nations	71,650
Total	641,500	Total	625,850

PRICES IN GERMANY.

REPORT, BY CONSUL-GENERAL VOGELER, OF FRANKFORT-ON-THE-MAIN, ON THE PRICES OF LEADING ARTICLES OF MERCHANDISE IN THE EMPIRE OF GERMANY IN JANUARY, 1883.

On the 14th day of June, 1882, I had the honor to send to the Department of State a report on the prices of leading articles of merchandise in the German Empire during the month of April, 1882, as published by the imperial bureau of statistics, reduced to American weight and coin. I now have the honor to transmit a statement of the prices of the same articles in Germany in the month of January, 1883, the information being derived from the same source. I deem these figures particularly interesting now, inasmuch as they show the decline of prices of all breadstuffs and most of the articles connected therewith or related thereto, brought about by the fair harvests in the United States and other countries, while it will also appear that the failure of other crops—notably of potatoes and hops—has brought about a decided increase of prices, the latter having risen from an average of about 24 cents to more than 90 cents per pound. In a general way, I think a comparison of the two tables of prices as they appear in my report of last June and in this one will be found of interest.

Respectfully submitted.

FERDINAND VOGELER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Frankfort-on-the-Main, March 22, 1883.

Average wholesale prices of leading articles of merchandise in the Empire of Germany in January, 1883.

Wheat, per 100 pounds:	
Berlin, good, sound, yellow	$1 93
Breslau, medium	1 60
Danzig, mixed	1 89
Frankfort-on-the-Main, from various countries	2 23
Halle-on-the-Saone, domestic, sound, country production	1 81
Cologne, Rhenish, faultless	2 15
Königsberg, good mixed	1 91
Leipzig, German, good, sound	1 73
Lindau, from various countries	2 42
Magdeburg, country	1 97
Mannheim, American, Russian, German, Hungarian, medium	2 37
Munich, Bavarian prime	2 01
Posen, good, sound, average	1 70
Stettin, Inland, Roumanian, Hungarian, average	1 64
Stuttgart, Russian, Hungarian, Bavarian, good	2 40
Average	1 99
Rye, per 100 pounds:	
Berlin, good, sound, average	1 48
Bremen, South Russian, good, sound	1 43
Breslau, good, sound	1 36
Danzig, Holland	1 34
Frankfort-on-the-Main, from various countries	1 63
Halle-on-the-Saone, domestic, sound	1 59
Cologne, Rhenish, faultless	1 69
Königsberg, good, sound	1 31
Leipzig, German, good, sound	1 53
Lindau, Hungarian	1 91

Rye, per 100 pounds:	
Lübeck, Russian	$1 49
Magdeburg, medium weights	1 52
Mannheim, medium, from all countries	1 76
Munich, Bavarian prime	1 69
Posen, good, sound, average	1 35
Stettin, Inland and Russian, average	1 44
Stuttgart, Bavarian and Würtembergian, good	1 85
Average	1 55
Barley, per 100 pounds:	
Breslau, medium	1 39
Danzig, large brewing, Prussian, Polish, Russian	1 32
Frankfort-on-the-Main, domestic and from the Wetterau	1 92
Halle-on-the-Saone, domestic, country, sound, medium	1 71
Königsberg, light	1 24
Leipzig, German, good, sound	1 85
Lindau, Hungarian	2 12
Magdeberg, Chevalier	1 80
Mannheim, from Baden, Bavarian, Palatinate, Hungarian, medium	1 85
Munich, Bavarian, prime	1 96
Posen, good, sound, average	1 36
Stettin, average of all kinds	1 32
Stuttgart, from Würtemberg, good	1 36
Average	1 63
Maize, per 100 pounds:	
Breslau, medium	1 57
Hamburg, American, mixed	1 56
Leipzig, American, good, sound	
Stettin, American and Roumanian	1 47
Average	1 53
Oats, per 100 pounds:	
Berlin, good, sound, average	1 34
Breslau, good, sound, average	1 20
Danzig, deliverable inland	1 20
Frankfort-on-the-Main, domestic	1 36
Halle-on-the-Saone, sound, country, medium	1 47
Cologne, Rhenish, faultless	1 52
Königsberg, good, sound	1 26
Leipzig, German, good, sound	1 41
Lindau, Bavarian	1 62
Magdeburg, medium, light	1 51
Mannheim, German, old and new, Russian, medium	1 45
Munich, Bavarian, prime	1 41
Posen, good, sound, average	1 28
Stettin, from various countries, medium	1 28
Stuttgart, Würtembergian, good	1 41
Average	1 38
Potatoes, per 100 pounds (exclusive of bag):	
Berlin:	
Good early red, distilling, unassorted	41
Good early red, sound, assorted, eating	63
Breslau:	
Good, sound Silesian, eating	48
Magdeburg:	
Pale red Saxonian, eating	60
Distilling	32
Stettin:	
Sound light red	49
Sound white	47
Distilling	36
Average	47

Hops, per 100 pounds:	
Nuremberg:	
Common country hops	$82 91
Lager-beer hops	89 46
Superior lager-beer hops	102 54
Average	91 63
Flour, per 100 pounds:	
a. Wheat flour:	
Breslau, bakers' brand, No. 00, exclusive of bag	3 29
Halle-on-the-Saone, domestic, No. 00, exclusive of bag	3 46
Cologne, Rhenish, No. 00, inclusive of bag	2 96
Lübeck, German, No. 0, exclusive of bag	3 00
Munich, Bavarian, No. 2, inclusive of bag	3 60
Posen, domestic, No. 00, inclusive of bag	3 00
Average	3 22
b. Rye flour:	
Berlin, good, sound, No. $\frac{0}{1}$, inclusive of bag	2 18
Posen, domestic, No. $\frac{0}{1}$, inclusive of bag	2 21
Average	2 19
Rice, per 100 pounds:	
Bremen:	
Rangoon, table, hulled	2 10
Broken, No. 0, hulled	1 69
Hamburg:	
Japan, hulled, lowest quotations	2 40
Rangoon, hulled, lowest quotations	1 91
Broken, hulled, lowest quotations	1 52
Lard, per 100 pounds:	
Bremen, refined American, Wilcox brand	12 08
Bacon, per 100 pounds:	
Bremen, salted American, half long, half short, clear middles	10 66
Cotton, per 100 pounds:	
Bremen:	
Middling upland	11 95
Good fair Oomra	9 14
Hamburg, New Orleans middling	12 02
Wool, per 100 pounds:	
Berlin, North German medium	36 00
Bremen, washed Buenos Ayres, prime	46 17
Hamburg, Cape, extra superior, snow-white	45 82
Hemp, per 100 pounds:	
Hamburg, Mexican fiber	8 72
Lübeck, St. Petersburg, pure hemp	5 12
Raw silk, per 1 pound:	
Crefeld:	
Milan Organsin classique, 18–20	6 32
China, 45–50	5 45
Raw iron, per 100 pounds:	
Berlin:	
Best Scotch cast, No. 1 Longloan	96
English (Middlesbro) No. 3	77
Breslau:	
Puddle-iron	63
cast-iron	68
Dortmund:	
Bessemer raw from the district of the Ruhr	73
Westphalian puddle from the district of the Ruhr	68
Dusseldorf:	
Best German puddle-iron	68
Best German cast-iron	81
Hamburg:	
Scotch No. 1	82
Middlesbro No. 1	65
Lubeck, forged Swedish bar-iron	2 53

Petroleum, per 100 pounds, including barrel:	
Bremen, American white refined	$1 62
Danzig, American white refined, duty paid	2 73
Hamburg, American white refined	1 67
Stettin, American white refined	1 88
Coal, per 100 pounds:	
Berlin:	
Westphalian, mixed for gas purposes, at place of loading	20
Upper Silesian, at place of loading	20
Lower Silesian, at place of loading	19
English nut, for smith use, at place of loading	18
Breslau:	
Lower Silesian, for gas, at the mine	11
Upper Silesian, for gas, at the mine	7
Danzig:	
Double sifted English nut coal, on board	13
Scottish machine coal, on board	13
Dortmund:	
Lump coal, for export, at the mine	8
Puddling coal, at the mine	6
Dusseldorf:	
Gas and flame coal, at the mine	8
Fat and lean coal, at the mine	6
Essen:	
Gas and flame coal, at the mine	7
Fat coal, at the mine	6
Lean coal, at the mine	6
Gas coal, at the mine	8
Hamburg:	
Prime West Hartley steam-sifted coal, on board	16
Sunderland nut coal, on board	15
Double-sifted Westphalian nut coal, on board	17
Saarbrucken:	
Flame coal	9
Fat coal	8
Average	11

ADULTERATION OF FOOD, DRINK, AND MEDICINE.

REPORT BY CONSUL WILSON, OF NANTES.

No attempt will be made to describe the numberless and everchanging means and substances used in these adulterations. It would be useless labor. Any one interested can study it in the volumes already written.

The object of this report is to consider and present to the authorities of the United States some suggestions as to the prevention of adulteration of food, drink, and medicine. Nearly all civilized nations have taken some steps looking in that direction. France, Germany, England have enacted years ago these laws of prohibition.

In France the average yearly convictions of offenders under these laws have been, from 1846 to 1850, 196 cases; from 1851 to 1855, 6,780; from 1856 to 1860, 8,442; from 1861 to 1865, 4,605; from 1866 to 1870, 3,014; from 1871 to 1875, 3,209; from 1876 to 1880, 3,398.

These convictions have not been solely for adulterations of food, drink, or medicine, but have also included other articles, and also cases of deceit as to kind or quality of the merchandise or the place of its manufacture.

But with all these convictions the adulteration of food and drink have been of great frequency. The difficulty of detection, the indifference of the public, the small amount involved in each transaction, the trouble, annoyance, and expense of prosecution, and the doubtful recompense following it even in cases of success were causes operating upon human nature applying in France as well as elsewhere.

In January, 1881, was established in Paris what I believe will prove the most effective engine for prevention yet devised. It was the organization by the city of a chemical laboratory, under the charge of an experienced chemist, as an adjunct to the health office, and of which the health inspectors are officers. In their inspections of markets, butcher shops, grocery and provision stores, cafés and restaurants, wine and beer saloons, druggists, milkmen, &c., whenever they found articles of which they were suspicious they took samples, sending them to the laboratory for analysis. Any private person could send a sample of any article, and it is made the duty of all police officers to give the necessary aid. The courts and procureur de la republique (district attorney) can call on the laboratory for an analysis of any article requiring such a test. Provision is made for payment in certain cases, but that is not to hinder the benefit to the public.

The working of this bureau is indicated in the following sketch. It belongs to the health office and the sanitary inspectors report to its superintendent, and, including these inspectors, the *personnel* is as follows:

One director or superintendent		$1,200
One deputy, per annum		900
One chemist of first class		480
Three chemists of second class, each		320
Three laborers, each		300
INSPECTORS.		
Eight inspectors, first class, each		480
Eight inspectors, second class, each		360
Thirty-two inspectors, ordinary		5,240
Material		4,000
Total per annum		13,280
Receipts for 1881:		
Paid analyses	$1,258	
Costs in court	2,105	
		3,363
Net cost for 1881		10,917

ROOMS OCCUPIED.

Office for superintendent.
Laboratory for superintendent.
Weighing-room; dark-room.
Large room for laboratory.
Cellar with seven rooms.

METHOD OF WORK.

Paris is divided into districts, and the inspectors are assigned to each district. They report all articles, either from their own observation or from the public, supposed to need analyzation. They made, in 1881, 24,655 visits of inspection. The expert chemists are kept at work, each one on his own specialty, in making analyses.

The analyses are of two sorts, one of which, the *unpaid*, is only general, defining the condition of the articles as *good*, *passable*, *bad*, *not dan-*

gerous; bad, dangerous. The other is paid, according to expense, from $1 to $4, and gives the exact composition of the product. The samples entered and analyzed in 1881 were as follows:

Analyses gratuitous	3,958
Analyses paid	378
Analyses by inspectors	2,181
In 1881, total analyses	6,517

The analyzers examine and report on the following particulars:

1. Component parts of the perfumery.
2. Lead in tin pipes, siphons, and cans or boxes of preserved meats, fruits, &c.
3. Salicylic acid in articles of food.
4. Mud and deposit of sewers and sinks.
5. Falsification of wine and adulteration of articles of food.
6. Beer and beer-pumps.
7. Coloring matter of playthings, sirups, and sugars.
8. Copper cooking-utensils.
9. Trichinosis in pork.
10. Milk.
11. Incombustibility of the decorations of theaters.
12. Analysis of air in certain quarters.

Results of analyses made in 1881.

Articles.	Good.	Passable.	Bad, not dangerous.	Bad, dangerous.	Total.
Wine	357	1,093	1,709	202	3,361
Vinegar	22	31	26	1	80
Beer	48	10	29	1	88
Cider	6	10	30	9	55
Sirups and liquors	40	32	53	9	134
Water	18	11	...	63	92
Milk and cream	318	177	542	....	1,037
Butter and cheese	30	12	29	....	71
Bread, pies, and cakes	45	13	11	....	69
Meats	55	10	21	....	86
Fruits, preserves, &c	39	7	....	25	71
Salt, pepper, and spice	45	13	82	....	140
Coffee, teas	37	7	7	....	51
Chocolate	26	24	33	....	83
Siphons, pipes, &c	85	10	....	45	140
Sundries—perfumeries	394	63	36	207	700
Totals	1,565	1,523	2,608	562	6,258

The proportions of articles found "bad" were, viz:

	Per cent.
Milk and cream	50.66
Wine	59.17
All others	50.43

The *gross* cost of each analysis was, for 1881, $2.03.

The *net* cost, deducting those paid for and costs allowed in court for analyses made for its use was, for each analysis, $1.50; for each trial, 21 cents.

A volume might be written on this subject. I forbear and have prepared, as the most practical step to a solution of these difficulties in the District of Columbia, the following draft of a bill to be presented to

Congress if it shall meet the approbation of those in authority. It is adapted from the French, German, and English laws on this subject.

Be it enacted, &c., That the manufacture, preparation, or sale of, or having possession of the materials or appliances with intent to manufacture, prepare, or sell any adulterated article of food, medicine, or drink is hereby declared to be a misdemeanor, and every person convicted thereof shall be punished by imprisonment not more than one year, or by fine not more than $500, nor less than $20, or by both such fine and imprisonment, at the discretion of the court.

2. It shall be the duty of the clerk of the court in every case of conviction under this act to prepare a statement of the offense and of the conviction, and publish the same in the newspapers and by posted notices, as required by law for other legal notices, the cost of which shall be taxed to the defendant.

NOTE.—Any other system of publication might be adopted which would be effective and certain, but publication is the best preventive.

3. It shall be sufficient to constitute adulteration under this act, that the article manufactured, prepared, or sold shall have been corrupted or debased, or changed in its composition or strength by the introduction or admission of any foreign substance, whether the same shall have rendered it unhealthful or not. But it shall be a good defense to a prosecution under this act if it be shown that due and full notice of the adulteration in its true ingredients and proportions has been given to the public and to the buyer at the time of or before the purchase.

NOTE.—I once thought of inserting the word "distilled" in connection with "prepared and sold," but concluded it would excite undue opposition, while the words used were equally effective. Many adulterations are made which are not hurtful, as water in many articles to increase the weight; this weakens the articles. But many others are adulterated by an increase of strength, such as alcohol in weak wine; so I have concluded "corrupted or debased, or changed in its composition or strength by the introduction," &c.

As to second clause, it is the deceit, actual or constructive, that makes the offense. If he advertises that his butter is oléomargarine, that his coffee is one-half peas or chicory, that his whisky is one-third water, his milk the same, while his sugar has one pound of sand to four of sugar, no one can be imposed on and no offense is committed. Perhaps the buyer wishes just such articles at the corresponding decrease in prices.

If under this clause the seller offers articles noxious or dangerous to public health, the law against druggists selling poisons should punish him; if not, another clause should be added.

4. It is hereby declared to be the duty of every manufacturer, preparer, and seller to ascertain and know whether the article he manufactures, prepares, or sells is adulterated or not, and no want of knowledge thereof shall be available as a defense.

NOTE.—If this provision be not adopted the act will be of little avail. The intention of a druggist who sells poison by mistake is no defense; nor should it be with the adulterator. It is his business *to know* that the article he sells representing to be pure is pure. The difference in the offenses should be provided for in the punishment, and if it were not cumbersome and could be made effective it might be well to provide for different grades of the offense—such as known or unknown, making or selling, nocuous or innocuous, wholesale or retail, first or second offense.

5. There shall be established at the city of Washington, under direction of the Commissioners of the District of Columbia (or under the Smithsonian Institution), a chemical laboratory under such rules and regulations as they may adopt for the management thereof. The persons employed shall consist of four operators, at a salary each of $1,200 per annum, one of whom shall be designated as superintendent and shall receive $600 per annum additional, all of whom shall be practical and scientific chemists, and two laborers, at $600 each per annum.

The person designated as superintendent shall be at the head of the laboratory, and shall have the management and control of the work to be performed. He shall be responsible for the accuracy of the tests and analyses, for the care and proper use of the apparatus and chemicals, and shall give bond for the faithful performance of his duties in the sum of $4,000.

It shall be the duty of the superintendent to make tests and analyses, free of charge, of all articles reported to him for that purpose by the head of any Executive Department of the United States Government, by the Commissioners of the District of Columbia, by the health officer, or by any district attorney of the United States, and to report back the results thereof. It shall also be his duty to make tests and analyses of any and all articles presented to him by any person who has deposited with the treasurer of the District a sum of money sufficient to cover the cost of such test analysis, which sum shall be fixed by the Commissioners and announced in these regulations.

All tests and analyses shall be made honestly and faithfully, and, so far as possible for science to determine, shall report the constituent elements truly and correctly.

NOTE.—I would suggest this laboratory might be made part of the Health Office. It would decrease the number of bureaus. It might be necessary to limit articles to those sent by the Commissioners, thus giving to them entire and direct control.

The Commissioners shall send to the United States district attorney for the District of Columbia each month, or more frequently if necessary, the results of the tests and analyses made at their request, or that of any officer of the District, together with the names of all persons who appear therefrom to have violated this act, and the names of all witnesses supposed to have knowledge thereof; and it shall be the duty of the district attorney to institute the necessary prosecutions.

NOTE.—The publication of these tests and analyses, with the names of the persons offending or adulterating, has been found the most effective preventive of adulteration.

7. For the protection of persons who may be charged under this act the superintendent is required to keep and retain in safe and good condition, until the expiration of the statute of limitation, samples of all articles tested or analyzed by him, which have been found to contain impurities or to have been adulterated, and, if requested, to deliver a portion thereof to the person charged, or to any other chemist designated by him, and of the other portion to make an analysis, if so re-

quested by the court charged with the trial of the cause, or the district attorney.

8. Any manufacturer, preparer, or seller of any article of food, drink, or medicine, who shall refuse to sell or deliver samples thereof to any health officer or inspector demanding the same in proper business hours and offering to pay a reasonable price therefor, shall, on conviction, be punished, &c.

9. Any article of food, drink, or medicine intended for sale, adulterated so as to come within the denunciation of this act, may be seized, captured, and confiscated as now provided by law for property found injurious to public health. If the articles can be purified so as to be innocuous, it shall be so done and then sold and the proceeds divided as now provided in cases of confiscated property (or paid to the Commissioners and added to the poor fund). If it cannot be so purified it shall be destroyed.

10. In any action before any court of the United States located in the District of Columbia, brought to receive the value of any articles of food, drink, or medicine, hereafter sold and delivered, the person charged may plead that said articles were adulterated when delivered, so as to come within the denunciation of this act; and if on the trial the said plea shall be sustained, then the claimant, seller of said articles and his assignee, if the claim has been assigned, shall forfeit and lose his said claim or demand, and the judgment of the court shall be one of forfeiture against him; but if and in case the party making such defense shall have received the articles and converted them to his owe use, then the court shall render judgment against him and in favor of the District of Columbia for the value thereof, and this act shall apply to cases wherein the United States is a party.

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Nantes, *April* 1, 1883.

ARTIFICIAL COLORING OF WINES.

REPORT BY CONSUL ROOSEVELT, OF BORDEAUX.

I have the honor to inclose herewith translation of an article published in the *La Gironde*, a journal of this city, April 1, 1883, on the artificial coloring of wines in the department of Aude.

GEO. W. ROOSEVELT,
Consul.

UNITED STATES CONSULATE,
Bordeaux, *April* 10, 1883.

ARTIFICIAL COLORING OF WINES.

[From La Gironde of April 1, 1883.]

Our private correspondent writes to us from Narbonne, March 29:

The syndicate of wines and spirits of Narbonne, in a petition to the minister of justice, rises, and not without cause, against the artificial coloring of wines, and claims an immediate and energetic check of that commercial fraud.

That petition, which we have before us, is long; we can give our readers only the essential parts of it. It is said therein that Mr. Dufaure, then minister of justice (in October, 1876) addressed the attorney-generals a circular letter requesting the repression of artificial coloring of wines. Has that circular been recalled? Such might be supposed on seeing how little it is cared for. Never, indeed, the petition continues, have the wine traders and the proprietors been so flooded, as they actually are, with prospectuses, circulars, advertisements, extolling powders, liquids, and other products fit for artificial coloring of wines. A number of documents are quoted, amongst which we find "Roussillon concentrated," "Vegetable concentrated extract," "Lignoline," "Deep-black hue," "Vegetable red," "Grape Caramel," and lastly, "Bordelaise hue," and "Bordelaise colorant." All the advertisements and circulars having for their titles the distinctive name of the recommended product, are mentioned to the minister of justice.

Our intention, the petitioners add, is not to act as denouncers, but to warn proprietors and trades against the extollers of adulterations. The petition ends in claiming the issuing of a new circular reminding, as Mr. Dufaure had done, not only that proceedings should be "taken against adulteration, *even inoffensive* when practiced fraudulently and with the intent of deceitfully giving wine the appearance of qualities which it does not possess, but that Articles 39–60 of the penal code, 1 and 3 of the law of May 17, 1819, allow to reach also all incitements, *not attended with a result*, to use coloring matters by *articles, advertisements, pamphlets, prospectuses,*" *&c.*

The qualified claims of the members of the syndicate of wines and spirits of Narbonne will certainly be listened to by the minister of justice. The welfare of the majority of commerce is at stake.

It would be imprudent, however, to expect from only one member of our Government, from him solely, the remedy to cause an evil to disappear in which every one is interested. It is sure that large quantities of wines artificially colored are sent to France by Spain, but are the senders merely Spaniards?*

It is not less certain that hundreds of hogsheads daily arrive on our market filled with the produce condemned by the petitioners; but are those casks and the wines they contain bought and ordered only by the consumers? It is difficult for us to believe so.

COLOMBIA AND ITS PEOPLE.†

REPORT BY MR. SCRUGGS, MINISTER AT BOGOTA.

From Honda, the head of steam navigation on the Magdalena, to Bogota, the capital of the Colombian Republic, the journey must be made on muleback. The distance is less than 70 miles, although it usually requires from three to four days to complete it. However, within the last few years, a line of coaches has been established between the federal capital and Agualarge, a stopping place some thirty miles distant from Bogota, so that the journey by muleback has been reduced to about 40 miles.

After perfecting all necessary arrangements the day previous, the traveler rises at six, takes a light breakfast of chocolate and bread, and hopes to be on the way by seven. But people here take life easy. Servants and guides and muleteers make no note of time, and it is quite useless to try to hurry them, so that if he gets fairly under way by ten o'clock he is fortunate. As he ascends a spur of the eastern Cordillera there is revealed to him a most enchanting view of the surrounding country. The atmosphere is singularly clear, pure, and exhilarating, and he breathes more deeply and easily. The senses are no longer oppressed by the sultry heats and intoxicating perfumes of the valley;

---

*This is denied by the Spanish newspapers.

†This is the second of a series of reports (the first appeared in No. 30) which Mr. Scruggs proposes to write on Colombia and its people, its industries and foreign commerce, and on the best means for the enlargement of the commercial relations of the United States therewith. The series very properly begins with a description of the country and its inhabitants, without a clear understanding of which it is impossible to fully appreciate its trade relations. The country, and the habits and customs of its people, being once understood, its foreign commerce is more easily comprehended.

the limbs recover their wonted elasticity, and the mind seems more clear and active.

Just beyond the deep, broad valley of the Magdalena are the snow-capped mountains of Tolina. They seem marvelously near, and yet they are more than a hundred miles distant, so very clear and transparent is the atmosphere of this elevated region.

In the opposite direction is the dish-shaped valley of Guaduas, fringed with luxuriant foliage of the coffee plantations and the virgin forests. In the center of this valley reposes the parochial village, with its church steeples reaching upward as if in feeble imitation of the adjacent mountain peaks.

This valley of Guaduas is over 3,000 feet above the sea level, and has therefore an equable and temperate climate. But the atmosphere is quite damp, and rheumatism, diphtheria, and goiter are among the prevalent maladies of the place. The population of the village is about 20,000, the basis of which is the Chibcha Indian, the race which inhabited this country at the time of the conquest by Quesada, in 1537. But here, as elsewhere in the Andes, the Indian has lost his race identity by amalgamation with the Castilian, and a Chibcha of pure blood is seldom seen, except in the more remote rural districts. The negro and his decendants are seldom seen here. They seem to thrive best in the hot, malarious region of the coast and on the margins of the great rivers.

The next village of importance is Villete. It has a population of about 2,000, mostly Indians and mixed breeds. Its elevation is only about 600 feet above the sea level, and it has an average temperature of about 85° F. Though quite hot, the atmosphere is singularly dry and sanitary, and the place is often resorted to by invalids from Bogota and the more elevated regions.

The valley is watered by the Rio Negro, justly so named, for its waters are as black as ink, so rendered by their passage through the coal and mineral deposits along the foot hills of the Sierra. Near by is a noted sulphur spring, and the extinct volcano which Humboldt described as likely one day to break out afresh and destroy this beautiful valley.

Up to this point our journey has been alternating between deep valleys and dizzy mountain peaks. We cross one only to encounter another. Such is Camino Real or "Royal Highway," the only available route between the Colombian capital and the outside world. Within the past few years it has been much improved, it is true, and at great expense to the Government; but it is still little else than a mere mule trail, not wide enough in many places for two mules to walk abreast, and so tortuous and precipitous as to be impassable, except on the backs of animals trained to the road. When we reflect that this is the overland highway of an immense commerce, and that it has been in constant use since the Spanish conquest, we naturally marvel that it is no better. It seems to have been constructed without any previous survey whatever, and without the least regard for comfort or convenience, making short curves where curves are quite unnecessary, or going straight over some mountain spur or peak where the ascent might have been rendered less difficult by easy curves. But to the observant traveler the inconveniences and hardships of the journey are in some measure compensated by the varied and captivating scenery. He passes through a variety of climates within a few hours ride. At one time he is ascending a dizzy steep by a sort of rustic stairway hewn into the rock-ribbed mountain, where the air reminds him of a chilly November morning; a few hours later he is descending to the region of the plantain and the banana, where the summer never ends and the rank crops of fruits and flowers chase each other in unbroken circle from January to December. On the bleak crests of the *paramos* he encounters neither tree nor shrub; a few blades of sedge and the flitting of a few sparrows give the only evidences of vegetable or animal life, while in the deep valley just below the dense groves of palm and cottonwoods are alive with birds of rich and varied plumage, and the air seems loaded with floral perfumes until the senses fairly ache with their sweetness.

Agualarge is, as I have said, the last stopping place before exchanging the saddle-mule for the coach. It is a little settlement of a few hundred inhabitants, situated on the eastern crest of the Cordillera which surrounds the vast altiplane of Bogota. We here dismiss our faithful mule and take coach omnibus for the cities of the plain. The transition from the intense midsummer heats of Villete, to the bleak November blasts of Agualarge, has been a journey of but a few hours. Our ears and finger tips fairly ache with cold, and a strange numbness is felt in every limb. But the descent to the edge of the plain is rapid and within thirty minutes we are greeted by the clear, bright rays of perpetual spring. The ripening wheat fields, fringed by primroses and perennial flowers, alternated by green pastures filled with sleek herds of sheep and cattle, afford a landscape worthy of the artist's pencil or the poet's enthusiasm.

This plain is the traditional elysium of the ancient Chibchas, and their imperial capitol was near the site of the present capitol of Colombia; and, perhaps, around no one spot on the American continent cluster so many legends of the aborigines, or quite so many improbable stories illustrative of the ancient civilization. Here one can almost imagine himself in the north temperate zone, and in a country inhabited by a race wholly different from the people heretofore seen in the republic. Agriculture and the useful arts seem at least a century ahead of those on the coast and in the torrid valleys of the great rivers. The ox-cart and plantation wagon have supplanted the traditional pack-mule and ground-sled. The neat iron spade and patent plow have taken the place of wooden shovels and clumsy forked sticks. The inclosures are of a substantial stone or adobe, and the spacious farm-house or *quinta* has an air of palatial elegance compared with the mud and bamboo hut of the Magdalena. The people have a clear, ruddy complexion, at least compared with those heretofore seen in the country; and their dialect is a near approach to the rich and sonorous Castilian, once so liquid and harmonious in poetry and song, and so majestic and persuasive in the forum. None of these agricultural implements and none of these commodious coaches and omnibusses were manufactured here or elsewhere in Colombia. They have all been imported from the United States or Europe. They were brought to Honda, packed in small sections, by the river steamers and thence lugged over the mountains, piece by piece.

One peon will carry a wheel, another an axle, a third a coupling-pole or single-tree, and the screws and bolts are packed in small boxes on cargo mules. The upper part or body of the vehicle is likewise taken to pieces and packed in sections. One man will sometimes be a month in carrying a wagon-wheel from Honda to the plain. His method is to carry it some 50 or 100 paces and then rest, making sometimes less than 2 miles a day.

When the vehicle finally reaches the plain, the pieces are collected and put together by some smithy, who may have learned the art from an American or English mechanic. One scarcely knows which ought to be the greatest marvel, the failure to manufacture all these things in

8 JUL 83

a country where woods, and coal, and iron ore are so abundant, or the obstacles that are overcome in their successful importation from foreign countries.

WILLIAM S. SCRUGGS,
Minister Resident.

ON THE PLAINS OF BOGOTA, U. S. C.

PATENT LAW OF BRAZIL.

TRANSMITTED BY MINISTER OSBORNE.

The general assembly decrees:

ARTICLE I. In the concession of a patent to the author of any invention or discovery, the law guarantees the right of property and exclusive use.

SECTION 1. For the effects of this law the following shall constitute an invention or discovery.

1st. The invention of new industrial products:

2d. The invention of new processes or the new application of known processes for obtaining an industrial product or result.

3d. The improvement of an invention already privileged, if it shall facilitate the manufacture of the product or the use of the privileged invention, or if it shall increase its utility.

Those industrial products, processes, applications, and improvements shall be considered new which up to the application for a patent have never, within or without the empire, been employed or used, and of which can neither be found descriptions nor publications of the method by which they can be employed or used.

SEC. 2. The following inventions cannot be made the object of a patent:

1st. Those contrary to law or morality.

2d. Those dangerous to public security.

3d. Those noxious to public health.

4th. Those which do not offer a practical industrial result.

SEC. 3. The patent will be conceded by the executive power, after the fulfillment of the formalities prescribed in this law and in its regulations.

SEC. 4. The exclusive privilege of a principal invention will only be valid up to 15 years, and that of an improvement to the invention, conceded to the author, will terminate at the same time with it.

If public necessity or utility require the free use (*vulgarisação*) of an invention, or its exclusive use by the state, during its privilege, the patent can be disappropriated, in conformity with the legal formalities.

SEC. 5. The patent is transmissible by any of the modes of cession or transference recognized by law.

ART. II. Inventors receiving privileges in other countries can obtain a confirmation of their rights in this empire, provided that they fulfill the formalities and conditions of this law, and observe the further dispositions in force applicable to the case.

The confirmation will give the same rights as a patent conceded in the empire.

SEC. 1. The priority of the property right of that inventor, who, having solicited a patent from a foreign country, shall make a similar petition to the imperial government within seven months, will not be invalidated by facts which may occur during this period, to wit: another similar, petition, the publication of the invention, and its use or employment.

SEC. 2. To the inventor who, before obtaining a patent, desires to experiment in public with his inventions, or wishes to exhibit them in an exposition, official or officially recognized, will be granteda title provisionally guaranteeing to him his right of property for a specified time, and with the formalities required.

SEC. 3. During the first year of the privilege only the inventor himself, or his legal successors, can obtain a privilege for improvements on his own invention. It will be permitted to third parties, however, to present their petitions within the said period in order to establish their rights.

The inventor of an improvement cannot engage in the industry benefited while the privilege for the principal invention lasts, without an authorization from its author; nor can the latter employ the improvement without an accord with him.

SEC. 4. If two or more persons solicit a privilege at the same time for an identical invention, the Government, except in the hypothesis of § 1 of this article, will require that they shall previously determine the priority, either by means of an accord or in a competent court.

ART. III. The inventor who seeks a patent will deposit in duplicate in the department which the Government shall designate, within a closed and sealed envelope, a report in the national idiom, describing the invention with accuracy and clearness, its purpose, and the method of using it, with the plans, designs, models and samples which may contribute to an exact understanding of the invention and the elucidation of the report, so that any person cognizant of the subject can obtain or apply the result, means, or product of which it treats.

The report shall clearly specify the characteristic feature of the invention (*privilegio*).

The extension of the right of patent will be determined by the said features, mention of this being made in the patent.

SEC. 1. With the document for deposit will be presented the petition, which should be limited to one single invention, specifying its nature and its purposes or applications in accordance with the report and with the documents deposited.

SEC. 2. If it shall appear that the subject of the invention involves an infraction of § 2, Art. I, or has for its object alimentary, chemical, or pharmaceutical products, the Government will order a previous and secret examination of one of the copies deposited, in conformity with the regulations to be issued; and in accordance with the result it will or will not concede a patent.

From a negative decision there will be recourse to the council of state.

SEC. 3. With the sole exception of the cases mentioned in the preceding paragraph, the patent will be issued without previous examination.

In it the object of the privilege will always be designated in a concise manner, with a reserve of the rights of a third party and of the responsibility of the Government, in respect to the originality or utility of the invention.

In the patent of an inventor, privileged outside of the empire, it will be declared that it is valid so long as the foreign patent is in force, never exceeding the specified period of § 4, Art. I.

SEC. 4. Beside the expenses and fees incurred the patentees shall pay a tax of $20 for the first year, $30 for the second, $40 for the third, increasing $10 for each year that shall ensue, over the preceding annuity, for the whole period of the privilege. In no case will the annuities be refunded.

SEC. 5. To the privileged inventor who improves his own invention will be given a certificate of improvement, which will be appended to the respective patent.

For this certificate the inventor will pay, once for all, an amount corresponding to the annuity which has become due.

SEC. 6. The transfer or cession of patents or certificates will not enter into effect until it has been registered in the bureau of agriculture, commerce, and public works.

ART. IV. The patent having been issued, and within a period of 30 days, the opening of the deposited envelopes will take place, with the formalities which the regulations shall specify.

The report shall be immediately published in the *Diario Official* and one of the copies of the designs, plans, models, or samples will be opened for the inspection of the public and for the study of interested parties, it being permitted to take copies.

SEC. 1. In case the previous examination of which § 2, Art. III treats, has not taken place, the Government, having published the report, will order a verification, by means of experiments, of the requisites and conditions required by law for the validity of the privilege, according to the method established for such examination.

ART. V. A patent will become of no effect if it is annulled or shall lapse.

SEC. 1. The patent will become null—

1st. If in its concession any one of the requirements of §§ 1 and 2, of Art. I, has been infringed.

2d. If the patentee did not have priority.

3d. If the patentee shall have falsified the truth, or concealed essential matter in the report descriptive of the invention, whether in its object or in the manner of using it.

4th. If the name of the invention shall be, with fraudulent purpose, diverse from its real object.

5th. If the improvement shall not have the indispensable relation with the principal industry and can be constituted a separate industry; or there shall have been priority (*preterição*) in the preference established by Art. II, § 3.

SEC. 2. The patent will lapse in the following cases:

1st. The patentee not making effective use of the invention within three years, counting from the date of patent.

2d. The patentee suspending the effective use of the invention for more than one year, except by cause of *forçe majeur*, judged sufficient by the Government, after consulting the respective section of the council of state.

By use is understood in these two cases, the effective exercise of the privileged industry, and the supply of the products in proportion to their employment or consumption.

It being proved that the supply of the products is evidently insufficient for the needs of employment or consumption, the privilege can be restricted to a zone determined by an act of the Government, with the approval of the legislative power.

3d. The patentee not paying the annuity within the terms of the law.

4th. The patentee, residing outside of the empire, not constituting an accredited agent to represent him before the Government or in court.

5th. Through the express renunciation of the patent.

6th. The patent or foreign title upon an invention also privileged in the empire, being discontinued.

7th. The term of the privilege having expired.

SEC. 3. The nullity of a patent or of a certificate of improvement will be declared by a decision of the commercial court (*juizo commercial*) of the capital of the empire, by means of the summary process of decree No. 737, of November 25, 1850.

The following are competent to promote an action for nullity:

The solicitor of the treasury (*procurador dos feitos da fazenda*) and his assistants, to whom will be forwarded the documents and proofs, corroborative of the infraction.

And any interested party, with the assistance of that official and his assistants.

An action of nullity in the cases of Art. I, § 2, Nos. 1, 2, and 3, having been begun, the execution of the patent and the use or employment of the invention will remain suspended until the final decision.

If the patent shall not be annulled, the patentee will be reinvested in its enjoyment with the integrity of the term of privilege.

SEC. 4. The lapse of patents will be declared by the minister and secretary of state for the affairs of agriculture, commerce, and public works, with recourse to the council of state.

ART. VI. The following will be considered infractors of the privilege:

1st. Those who, without license from the patentee, manufacture the products, or employ the processes, or make the applications which are the object of the patent.

2d. Those who import, sell, or expose for sale, conceal or receive for the purpose of sale, counterfeited products of the privileged industry, knowing what they are.

SEC. 1. The infractors of a privilege will be punished, in favor of the public coffers, with a fine from $500 to $5,000; and in favor of the patentee with from 10 to 50 per cent. of the damage caused, or which may be caused.

SEC. 2. The following will be considered as aggravating circumstances:

1st. The infractor to be or to have been an employé or workman in the establishment of the patentee.

2d. The infractor to associate with an employé or workman of the patentee for acquiring knowledge of the practical method of obtaining or employing the invention.

SEC. 3. The cognizance of infractions of a privilege belongs to the *juizes de direito* (district judges) of the *comarcas* (districts) where they reside, who will issue, on the petition of the patentee or his legal representative, the warrants of search, apprehension, and deposit, and will prescribe the preparatory or preliminary proceedings of the process.

The sentence will be governed by law No. 562, of July 2, 1850, and by decree No. 707, of October 9, of the same year, so far as they apply to the case.

The products of which Nos. 1 and 2 of this article treat and the respective instruments and apparatus will be adjudged to the patentee by the same sentence which condemns the authors of the infractions.

SEC. 4. The process will not hinder an action by the patentee to secure indemnification for damage caused or which may be caused.

SEC. 5. Commercial jurisdiction is sufficient for all the causes relative to industrial privileges, in conformity with this law.

SEC. 6. The following will be punished with a fine of from $100 to $500 in favor of the public coffers:

1st. Those who announce themselves as possessors of a patent, using the emblems, marks, inscriptions, or labels upon products or objects prepared for commerce or exposed for sale, as if they had been privileged.

2d. Those inventors who continue to exercise an industry as privileged, the patent being suspended, annulled, or lapsed.

3d. Those privileged inventors who in prospectuses, advertisements, inscriptions, or by any mode of public notice shall mention patents without designating the special object for which they were obtained.

4th. Those professional men or experts who in the hypothesis of § 2 of Art. III, cause the general diffusion of the secret of the invention, without prejudice, in such case, to the criminal or civil actions which the laws permit.

Sec. 7. The infractions of which the preceding paragraph treats will be prosecuted and judged as political crimes, in conformity with the legislation in vigor.

Art. VII. When a patent shall be conceded to two or more co-inventors, or when it becomes common by a title of gift or succession, each one of the coproprietors can use it freely.

Art. VIII. If a patent shall be given or left in usufruct, the usufructuary will be obliged, when his rights cease through the extinction of the usufruct or termination of the term of privilege, to give to the owner of the property the value at which it shall be estimated, calculated with relation to the time which the usufruct has lasted.

Art. IX. The patents of invention already conceded will continue to be governed by the law of October 26, 1830, there being applied to them the dispositions of Art. V, § 2, Nos. 1 and 2, and of Art. VI of this present law, with the exception of pending processes or actions.

Art. X. All dispositions to the contrary are hereby revoked.

DWELLING HOUSE ACCOMMODATION IN GLASGOW.

REPORT OF CONSUL HARTE.

In an address recently delivered in this city to the students of the Glasgow University, by Mr. John Bright, on the occasion of his inauguration as lord rector, the somewhat startling statement was made that 76½ per cent. of the persons residing in Glasgow lived in houses of one room. As Mr. Bright did not enter into details, nor did the newspapers comment upon it at the time, I have thought it might be of interest to the Department to receive the facts and figures as I have hastily compiled them from the statistics.

The entire population of Glasgow at last census, in 1881, was 511,520. This amount only refers to the city proper, but when most of the suburban burghs are taken into account, and these to all intents and purposes are actually part and parcel of the city, as much as New York and Harlem, or Washington and Georgetown, (although having distinct municipalities) the number is swelled to 705,140. Of those burghs, Govan is the largest, with 50,000 inhabitants, Partick next, with 33,000, and then follow in proportion Maryhill with 8,000, Hillhead 7,000, and others with an average of 3,000 each. Govan, Partick, and Maryhill, may honestly be said to be the only burghs having real individuality, for in the cases of the two larger a very great percentage of the people both work and reside on the spot; but the dwellings in the others are for the most part made up of Glasgow merchants' residences. In Glasgow the proprietors of ground believe in making as much out of it as possible, and the blocks of houses are nearly all built four stories high, or about forty feet, and these are divided into one, two, three, four or more apartment houses according to situation and locality; stone being abundant in the district, that material is all but universally used, and, as a matter of course, the exteriors have fine appearance.

In building, a body of experts in such matters, called the "dean of guild court," insist on regularity in construction, and compel proprietors to adhere to the conditions of their like deeds as to uniformity of design, height, &c., and it is recorded that one builder who had exceeded the traditional four stories, on being brought before the said court, pleaded ignorance on the point, and declared that there "was no ground rent up there." He had, in fact, paid too high a price for his ground, and wanted to make the speculation pay by adding a fifth story.

At the last census return the total population of the city was, males, 248,467; females, 263,053; total, 511,520.

These were divided over the following districts:

Bridgeton	39,628
Camlachie	37,988
Dennistown	46,116
Calton	37,448
Blackfriars	33,960
St. Rollox	42,479
Blythswood	30,463
Milton	35,610
Kelvin	53,787
Anderston	38,753
Hutchesontown	44,447
Gorbals	39,127
Tradeston	17,904
Pollokshields Park, landwards	13,100
Total within Glasgow municipality	511,520

The population of the suburbs calculated from the census returns gives the following facts:

Partick and Hillhead	38,988
Govan	51,783
Rutherglen	13,786
Maryhill	18,386
Shelleston	9,229
Shawlands	798
Cathcart, Langside, &c	12,198
Govanhill, Strathbungo, &c	5,950
Pollokshaws, &c	5,451
Kinning Park, &c	15,757
Dennistown, landward	6,009
St. Rollox, landward	945
Gorbals	5,010
	193 620

It will thus be seen that the entire population of Glasgow and suburbs, as at 1881, may be calculated as under:

Glasgow	511,520
Suburbs	193,620
Total	705,140

Increase since 1871, 110,888.

Since then, owing to combined prosperity in certain kinds of trades, the increase of population, both in Glasgow and suburbs, but more particularly in the larger suburbs, may be calculated at 15,000 (for it is probable that in two years Govan and Partick, owing to unusual activity in the shipbuilding trade, have added over 8,000). This would give for Glasgow and suburbs 720,140.

In 1881 the total number of houses in the city was 119,059, and of these 12,724 were unoccupied. They were divided as under:

Houses of one room	35,843
Houses of two rooms	52,624
Houses of three rooms	17,746
Houses of four rooms	6,623
Houses of five rooms and upwards	6,223
Grand total	119,059

Calculating on the numbers of new tenements built since then, and making allowance for old properties taken down by the Glasgow City Improvement Trust, and also a large block of houses to make room for the new municipal buildings in the center of the city, the total number of houses will not now be far short of 121,000, and of these no fewer than 89,600 are of one and two apartments. The proportion in the larger suburbs, too, will be about the same.

Going back to returns I find that the average rooms for inhabited houses is 2.322. The number of persons found in each occupied house in 1881 was 4.738. It will thus be seen that two-thirds of the people of the commercial metropolis of Scotland live in houses of not more than two apartments, and the following statistics for the city districts will give a fair indication of the grouping of families:

Districts.	Families in houses of one room.	Families in houses of two rooms.	Total number of families.
Bridgeton	4,179	3,885	8,946
Camlachie	4,160	3,701	8,619
Dennistown	2,814	4,027	9,758
Dennistown, landward	295	409	909
Calton	3,094	3,714	8,234
Blackfriars	3,008	2,569	7,059
St. Rollox	2,982	4,296	9,075
St. Rollox, landward	58	101	198
Blythswood	2,266	2,225	6,878
Milton	2,986	3,773	8,035
Kelvin	2,898	3,967	12,538
Anderston	3,273	3,914	9,001
Hutchesontown	3,902	5,140	10,258
Hutchesontown, landward	249	271	1,258
Gorbals	2,778	3,141	8,964
Gorbals, landward	104	296	10,084
Tradeston	1,735	1,638	4,369
Tradeston, landward	120	104	1,076
Kinning Park	745	1,041	3,028
Kinning, landward	943	1,257	3,197
Totals	**42,687**	**49,657**	**122,581**

There is one startling fact in connection with this social subject which I cannot help pointing out. The operative classes who live in these apartments are remarkably prolific; and I have it from the best authority that 950 families live in Glasgow at the present time whose circle number from ten to sixteen persons. This means a population of something like 10,000 persons living in 1,853 apartments. Whether this prolific quality is the cause or result of overcrowding is a matter of argument. I only record the fact.

The rents of houses of one apartment average about £6 per annum, and those of two £9. In many instances, however, the rents of the single dwellings are paid monthly, and it might be mentioned that in Glasgow persons paying less than £10 per annum are only made liable for half dues for the "police rates." These come to something like 2*s.* 6*d.* per pound, the full amount of which is exacted from the inhabitants living in houses of two rooms and upwards.

These, as nearly as I can gather, are the facts upon which the wise and eloquent lord rector based his statement. I need not point out to the Department that it does not follow, as a logical sequence, that the honesty of Glasgow is greater or more marked than that of the other large cities of Great Britain; *non constat* that the enormous majority of dwellers in one or two rooms represent a degree of destitution greater than the mixed poverty of other cities; or that this 76½ per cent. ever become as frequently a tax upon the state or private charity. I believe there is less destitution, less absolute deprivation, less misery and want in Glasgow than in her sister cities. There is certainly less dependence upon charity and less open mendicancy here than elsewhere. The poorest Scotch laborer is too proud to beg. My casual impression of him is that he does not spend what he does not earn—and seldom even as much as he does earn—and that what may seem to be the social sin of poverty is perhaps only the Scotch beatitude—thrift.

BRET HARTE,
Consul.

UNITED STATES CONSULATE,
Glasgow, April 13, 1883.

VALUE OF LANDED PROPERTY IN FRANCE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The value of landed property in France, as ascertained after four years' patient investigation by the Government of the Republic, having regard to its rentals and its market value, is ascertained and reported to be $17,675,519,000. This does not include the value of the buildings, which, if added to that of land (according to the received estimates in France, and I believe in Europe generally), would make the total value of lands and buildings $26,468,020,000. The net revenues obtained from from landed property (lands) is $500,485,000.

By comparing the figures of the revenue with those of the market value and separating each according to the nature of the property, it is found that taken together, *i. e.*, *ensemble*, the revenue from rural property with a valuation of $353.10 per hectare, is $10.20 per hectare, or an investment at 2.89 per cent.

The rural property of France is divided into six great categories, viz: Superior lands, such as orchards, hemp fields, and gardens; arable lands, properly so called; pasture, meadow, or grazing lands; vine lands; timber; and lands or commons more or less cultivated.

The superior lands occupy actually a superficies of 695,000 hectares, having a market value of $738,997,000, and yielding a net revenue of $22,291,500.

The average of the hectare being thus $32, an investment consequently of 3 per cent.

The arable lands cover a surface of 26,000,000 of hectares, upon a total area of 50,000,000 of hectares of rural property, yielding a net revenue of $289,500,000, or by the hectare $10.80, or an interest of 2.58 per cent.

The meadow or pasture lands are even more favored. Of these there are actually 4,998,280 hectares, rendering an income of $93,268,987, representing a market value of $2,856,306,974, being an investment at the rate of 3.26 per cent., and an income per hectare of $18.54.

In spite of the ravages of phylloxera, the vines of France still show an important production; 2,320,000 hectares are devoted to vineyards, and the net revenue from these amounts to $58,198,185, which represent an average income per hectare of $24.89, or an annual interest of 4.38 per cent., continuing thus the most productive of rural investments.

The timber lands of France cover a superficies of 8,397,000 hectares. Their market value reaches $1,208,587,490, and the net revenue derived is $36,459,630, an average of $4.34, or 3 per cent. per hectare, the value of each hectare being $144.19, making these lands equal in profit to orchards and gardens, and superior to arable lands.

Meadows and pastures cover a superficies of 6,706,800 hectares, having a value per hectare of $39.90, yielding a revenue of $1.18 per hectare.

From year to year there has been an increase in the value of unproductive lands.

The inquiries made by the Government in this regard, with the same care as in all other instances, show that since 1879 there has been cleared 1,406,155 hectares, or nearly 3,500,000 acres, which are at present classified among arable and timber lands and vineyards, and which, under recent laws, are so taxed.

For the information presented above I am indebted to the honorable Mr. Tirard, at present minister of finance (secretary of the treasury).

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, *March* 21, 1883.

FARMING IN BELGIUM.

REPORT BY CONSUL TANNER, OF LIEGE.

From the accompanying table it will be seen that Belgium presents, comparatively, the largest cultivated area of any country in the world, being nearly, if not quite, 60 per cent. of her entire territory, including rivers, mountains, and railways.

Where every square yard of land that can be cultivated is constantly under tillage, and has been so, and will continue to be so for years, it renders a statement of not only acreage, but of yield, the more valuable.

Acreage in Belgium cannot fluctuate, because all available land is cultivated.

That that is not available for crops is made remunerative from stones or timber.

I estimate the average production of Belgium of all grain at 64,013,113 bushels, and the consumption of the same at 18 bushels per capita. This to a population of 5,713,913 would require 103,750,434 bushels, which would show a deficiency to be supplied of 39,737,321 bushels.

The large allowance per capita comes from the fact that the laboring classes subsist almost entirely on bread. This, too, being a Catholic country, is calculated to increase the consumption of bread by the better classes. Horses, chickens, and cattle are fed here on cereals. All this considered, it would make my apparently high estimate at first sight seem small on reflection.

It is difficult to arrive at the expenses attending the cultivation of an acre of land, as that depends so much on the product and the system of cultivation, as well as upon the cost of the different manures used.

I have talked with many farmers, and they all agree that they make no profits on their crops. By the strictest economy they make enough to eke out an existence on the *tout ensemble.* Poultry, eggs, and dairy products contribute largely towards enabling them to do this in connection with farming, and it is on this department of farming that their success hinges.

The inclosed table shows an annual production of 274,967,824, or 48 eggs to each inhabitant of this country, with an area no larger than the State of Georgia. I know of no country that presents a more interesting field to the statistician. Sixty per cent. of its population are employed in some kind of labor, which is a larger percentage than that of any other country in the world. Labor is cheap, and abundant, which is much better than being dear and scarce.

Farming in most of the European States is pursued more from habit than from any encouragement of profit. It is strict attention to the most minute details, and economy at every possible point, that brings the Belgian farmer through the breakers that threaten his destruction. Hundreds of matters too small for our farmers to notice, would be fatal to the Belgian farmer to ignore. If our farmer practiced the same economy his profits would perhaps be double what they now are.

Straw from grain is treated by the Belgian like it had a value. Straw fetches in this market and throughout Europe from $10 to $22 per ton.

It would be well for our farmers to note this, and, by using compressing machines to give it the smallest possible bulk, it seems to me that this item of farming could prove to be a source of revenue and export.

His manure pile is covered in order that the rain will not wash away its best ingredients, and if an animal or fowl is sick it is instantly separated from the flock and every attention given it.

If his horse becomes helpless from age or is crippled, if not diseased, it is sent to the market and butchered. There is an average of 528 horses butchered in Liege per annum, and there cannot be far short of 10,000 butchered in Belgium. Horse-flesh fetches on an average 5 cents per pound.

Americans must not be misled from this statement into the supposition that people here eat every and any thing; on the contrary, the cattle brought to many other markets would be rejected in Belgium and not permitted to be butchered.

All beasts that are butchered here must first be carefully inspected by a veterinary surgeon, and marked according to their quality. In this and all Belgian cities there is a large brick building set apart by the city to which all beasts to be butchered must be sent. They are carefully examined by a veterinary surgeon employed by the city, and if they show the slightest symptoms of disease are condemned, killed on the spot, and instantly buried. If the beast is sound but lean, it is marked with a red mark in a conspicuous place, which denotes second quality of beef. If it is in the best condition a blue mark is made on the breast, and two blue cockades given to its owner.

One of these cockades the farmer is glad to keep, and if one goes into a farm-house here, it not infrequently happens that one sees the walls of the parlor decorated with these blue cockades. The second cockade goes to the shop where the meat is retailed, and no one is allowed to use the blue unless they have bought the beef that has won it, under severe penalties.

The city butchers the beast in the most approved manner at a very moderate charge. This simple manner is most effective in guaranteeing the best of beef, because it can be seen at a glance the inducements to both the farmer and to the dealer in having the blue cockade; his cattle would not fetch as much in the market with the red mark, nor the shop be patronized so extensively, without the blue cockade. This system does more; it guarantees pure beef, and offers sufficient encouragement for the best qualities.

Horses are similarly examined before being butchered, and those buying the flesh know what they are buying, and the laboring-classes are glad to get it.

The law is severe on any one who should butcher a beast without having it examined, and no deception is used about the quality of beef, nor can any be used. The blue cockade speaks for itself, and a second-class shop can lay no pretensions to having first-class meat.

Horse-flesh that is retailed is sold in shops that only deal in that flesh.

All beasts *must be* butchered at the building set apart for that purpose by the city.

I might write at great length on the many advantages of a system of this kind, but will forbear. The only thing that can be said against eating horse-flesh is that, it being a domestic animal, it seems too much like eating a friend.

Here the horse is divested of this piece of sentimentalism, and it is happy for the owner that this is the case.

GEO. C. TANNER.

UNITED STATES CONSULATE,
Liege and Verviers, March 29, 1883.

Statement showing population, acreage, acreage in cultivation, average yield per acre, number of cattle, fowls, and eggs produced in Belgium for 1882.

Population	5,713,913
	Acres.
National area	7,295,783
Land in cultivation	4,000,000
Other productive land	2,000,000
Total productive land	6,000,000
In cereals	2,400,000
Farinaceous crops	483,700
Other crops	583,000
In orchards	499,200
Fallow land	135,100
Vines	800
In woods	1,200,400

RECAPITULATION.

	Acres.	Average yield per acre.	Average price per bushel.
		Bushels.	
Wheat	895,700	27.9	$1.45
Rye	713,113	25.4	1.50
Oats	567,727	42.5	50
Barley	120,000	35.1	1.50
Buckwheat	35,000	24.9	1.00
Pease and beans	60,000	Not known.	Not known.
Sugar beets	44,000	do	Do.
Hops	9,000	do	Do.
Maslin	88,000	do	Do.
Hemp	7,280	do	Do.
Flax	104,000	do	Do.
Tobacco	4,000	p'ds 1,183	.09
Chicory	13,000		Not known.
Potatoes (Irish)	400,000	194	1.50

Cost of production, manures, rent of land, and everything included, $35 an acre.

FARM ANIMALS.

	Number.	Value.
Horses	300,000	$240 00
Mules and asses	100,000	....
Cattle	1,300,000	63 00
Cows*	713,800	100 00
Sheep	787,913	2 00
Hogs	593,813	500 00
Goats	298,000	220 00
FOWLS.		
Chickens	8,669,565	70
Ducks	15,000,000	50
Turkeys	31,000	3 00
Eggs produced	276,121,203	†30

* Included in cattle. † Per dozen.

THE WORLD'S COFFEE.

REPORT BY CONSUL-GENERAL MERRITT, OF LONDON.

The proposed commercial treaty between the United States and Mexico has naturally attracted great attention in England, both in business and Government circles, and Parliament is being constantly memorialized by commercial bodies to again open diplomatic relations with Mexico so that English trade with that country may not be supplanted by the United States.

The possibility of Mexico growing large quantities of coffee for the United States was recently referred to by a member of Parliament as one of the probable results of the treaty, which would act unfavorably to English trade interests. At present there exists a three-cornered commercial relationship between Brazil, the United States, and Great Britain, the United States consuming the great portion of the Brazilian coffee exports, the settlement for which is made through Great Britain. English manufactures are sent to Brazil in payment for the coffee, and cotton and grain are sent from the United States to Great Britain in payment for English goods forwarded to Rio Janeiro. Should Mexico supply the United States with coffee there would ensue a derangement of the trade between Brazil and England.

England's position in the general trade is very important, both as being a large importer for re-exportation and as acting as the financier of the whole traffic. In order to illustrate the general bearing of the coffee business, the changes of recent years, the production, consumption, and distribution of the product, I have prepared a series of tables, with explanatory notes, covering the subject, which are herewith submitted.

PRODUCTION OF COFFEE.

There are no reliable data wherefrom a complete estimate can be formed of the total produce of coffee in all parts of the globe. The fluctuations of the annual output are great, and the distances far and wide apart in respect to the countries where coffee is cultivated. Admitting this, it may be asserted, however, with certainty that with the exception of the island of Ceylon there has been more coffee produced in all countries during the past five years than at any previous period. This growth has been in sympathy with an increased demand for home consumption in Europe and in the United States. In British India coffee-growing has made progress though on a small scale. (See Table K.)

No continuity of shipments can be tabulated from either Singapore or Manilla. Those from Java and Sumatra are, as far as Europe is interested, embodied in the statistics under the head of the Netherlands. The retrograde movement in Ceylon becomes apparent by the table marked K. Tea and quinine are now under cultivation there in lieu of coffee over large tracts of land.

As a rough estimate of the entire production of the berry, the following table may be given, showing average of one year in two quinquennial periods:

Where produced.	1873–'77.	1878–'82.
	Tons.	*Tons.*
Brazil	200, 000	290, 000
Java and Sumatra	50, 000	65, 000
Ceylon	40, 000	26, 000
British India and Africa	24, 000	30, 000
British West Indies	1, 800	2, 000
Cuba and Porto Rico	2, 500	3, 000

The statistics of production of Domingo and Hayti, Costa Rica, Venezuela, Guatemala, and Colombia are not at hand for comparison. As bearing on the probable production of Brazil it may be said that the exports in 1881, on consular authority, were 4,139,419 bags, of which about 50 per cent. went to the United States.

CONSUMPTION OF COFFEE.

On a basis of 145,000,000 population of Europe in 1866, exclusive of Russia, where coffee is not in general use, it has been ascertained from official sources that the consumption of coffee was 443,000,000 pounds, or a fraction over 3 pounds *per capita.* In 1881, the total consumption had increased within the same radius to 763,636,000 pounds, and the population to about 175,000,000, and the average *per capita* consumption to about 4.40 pounds. The total supply of coffee to the United States was in 1866, 174,281,000 pounds; in 1881, 455,190,000 pounds. Deducting a limited quantity for re-exportation, the average consumption per capita in the United States: 1866, 5.60 pounds; 1881, 9.10 pounds.

In other words, the United States average per head is nearly double that of Europe, and is constantly increasing.

COFFEE CONSUMPTION IN EUROPE AND THE UNITED STATES.

TABLE A.—*Summary of detailed statements showing the supply of coffee, in number of pounds avoirdupois, received for domestic consumption in various countries during sixteen years.*

Countries.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
France	98, 650, 000	103, 988, 000	105, 066, 000	110, 721, 000	167, 322, 600	88, 293, 600	36, 757, 800	98, 636, 800	85, 159, 600	105, 628, 800	117, 671, 400	105, 184, 200
Germany	90, 915, 700	120, 187, 300	138, 851, 700	148, 918, 000	119, 453, 400	159, 974, 000	204, 090, 000	216, 208, 000	198, 091. 000	221, 683, 000	234, 080, 000	210, 793, 000
Netherlands	27, 841, 000	45, 918, 000	48, 314, 000	47, 146, 000	38, 557, 000	438, 872, 000	22, 743, 000	78, 395, 000	52, 396, 000	93, 365, 000	23, 205, 000	75, 374, 000
Belgium	42, 598, 000	47, 282, 000	51, 917, 500	45, 170, 000	49, 368, 000	51, 546, 000	49, 020. 000	49, 748, 000	41, 848, 000	48, 162, 000	58, 240, 000	44, 849, 000
Denmark	9, 608, 500	9, 842, 000	13, 804, 400	4, 790, 700	6, 783, 000	12, 487, 800	6, 344, 400	16, 266, 400	5, 202, 700	9, 544, 600	9, 193, 200	8, 221, 500
Norway	12, 781, 700	13, 352, 500	12, 600, 400	12, 739, 300	11, 847, 400	13, 995, 000	14, 664, 400	17, 123, 600	10, 751, 600	15, 070, 000	15, 895, 500	16, 373, 400
Sweden	14, 142, 900	17, 470, 400	14, 818, 400	15, 757, 000	17, 471, 500	19, 245, 400	17, 982, 800	24, 695, 000	19, 853, 000	21, 851, 000	24, 738, 000	23, 885, 700
Russia	12, 377, 300	14, 658, 900	11, 445, 200	16, 799, 900	15, 856, 600	17, 716, 800	16, 116, 500	14, 740, 900	16, 467, 300	18, 021, 000	18, 021, 200	10, 333, 400
Austria	42, 508, 000	46, 595, 200	51, 523, 800	52, 606, 100	58, 193, 300	67, 612, 900	70, 737, 400	75, 503, 600	71, 689, 800	69, 784, 000	71, 944, 900	74. 475, 700
Italy	27, 629, 600	25, 498, 200	27, 105, 100	30, 195, 400	27, 753, 000	28, 847, 500	27, 218, 900	28, 511, 600	23, 529, 000	29, 876, 100	32, 720, 000	27, 764, 000
Switzerland	16, 267, 700	17, 833, 700	19, 256, 200	17, 6[illegible]0, 500	14, 882, 500	20, 641, 900	16, 860, 300	18, 444, 400	14, 497, 700	20, 659, 300	21, 924, 200	17, 131, 600
Spain, Portugal, Turkey, Greece, and Balkan States	4, 000, 000	4, 000, 000	5, 000, 000	5, 000, 000	5, 000, 000	6, 000, 000	5, 000, 000	5, 000,000	6, 000, 000	7, 000, 000	6, 000, 000	7, 000, 000
Total	399, 320, 400	466, 626, 200	499, 702, 500	507, 523, 900	532, 488, 300	530, 222, 900	487, 535, 400	644, 273, 200	545, 485, 900	660, 376, 200	633, 633, 800	621, 385, 500
Great Britain	33, 658, 344	40, 224, 856	38, 836, 224	45, 283, 680	35, 080, 624	19, 343, 056	7, 599, 312	28, 908, 392	38, 415, 568	72, 775, 840	15, 327, 648	55, 622, 128
Total Europe	432, 978, 744	506, 851, 056	538, 538, 724	552, 807, 580	567, 568, 924	549, 565, 956	495, 135, 712	673, 176, 592	583, 901, 468	733, 152, 240	648, 961, 448	677, 007, 628
United States	174, 281, 000	187, 237, 000	208, 984, 000	264, 161, 500	235, 257, 200	317, 992, 000	298, 806, 000	293, 883, 900	285, 271, 700	321, 970, 800	341, 089, 200	331, 639, 000

Table A.—*Summary of detailed statements showing the supply of coffee, &c.*—Continued.

Countries.	1878.	1879.	1880.	1881.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
France	119, 031, 000	125, 017, 200	127, 012, 600	142, 331, 000
Germany	218, 713, 000	248, 266, 000	207, 284, 000	229, 141, 000
Netherlands	85, 209, 000	52, 079, 000	65, 975, 000	73, 022, 000
Belgium	50, 773, 000	54, 916, 000	50, 061, 000	52, 500, 000
Denmark	8, 236, 700	10, 705, 900	9, 615, 700	9, 000, 000
Norway	13, 422, 000	15, 903, 500	15, 969, 400	16, 725, 000
Sweden	23, 485, 200	23, 830, 300	25, 168, 000	24, 600, 000
Russia	16, 049, 900	17, 008, 200	18, 362, 300	18, 000, 400
Austria	87, 788, 600	42, 479, 200	69, 519, 100	78, 562, 000
Italy	27, 933, 400	34, 089, 000	23, 480, 000	31, 103, 000
Switzerland	18, 332, 200	21, 191, 700	18, 547, 100	21, 523, 500
Spain, Portugal, Turkey, Greece, and Balkan States	7,000, 000	8, 000, 000	9, 000, 000	10, 000, 000
Total	675, 974, 400	653, 486, 900	639, 994, 300	705, 907, 900
Great Britain	27, 368, 544	35, 514, 304	40, 015, 114	57, 728, 000
Total Europe	703, 342, 944	689, 001, 200	680, 009, 414	763, 635, 900
United States	309, 882, 000	377,848, 000	446, 851, 000	455, 190, 000

GREAT BRITAIN.

Table B has the tendency to show the difference between the relative consumption of tea and coffee. While the first-named article commands an average of 4½ pounds per head of population, the consumption of coffee is confined to a rate less than 1 pound.

The tables marked C and D show, respectively, the imports from British possessions and foreign countries. The table marked E explains the uses of the trade, while in Table F the re-export of surplus import is illustrated.

The total results are summarized in the table marked G, and are designed to show the actual consumption throughout Europe; while another compilation, marked H, explains the position which obtains between Europe and the United States relative to production.

Table B.—*The consumption in Great Britain of coffee, cocoa, and tea, distinguishing the number of pounds entered for home consumption on which duties have been collected.*

Years.	Coffee.	Cocoa.	Tea.
	Pounds.	*Pounds.*	*Pounds.*
1841	28, 370, 857	1, 938, 847	36, 675. 667
1842	28, 519, 646	2, 246, 569	37, 355, 911
1843	30, 979, 404	2, 547, 034	40, 293, 393
1844	31, 352, 332	2, 589, 977	41, 363, 770
1845	34, 293, 190	2, 579, 407	44, 193, 433
1846	36, 754, 554	2, 951, 206	46, 740, 344
1847	37, 441, 373	3, 079, 198	46, 314, 821
1848	37, 077, 646	2, 919, 591	48, 734, 789
1849	34, 399, 374	3, 206, 746	50, 021, 576
1850	31, 161, 358	3, 080, 641	51, 179, 302
1851	32, 501, 545	2, 978, 344	53, 949, 059
1852	34, 978, 432	3, 228, 627	54, 713, 054
1853	36, 983, 122	3, 997, 108	58, 834, 087
1854	37, 350, 934	4, 452, 529	61, 963, 041
1855	35, 764, 564	4, 383, 023	63, 429, 286
1856	34, 995, 944	3, 634, 155	63, 278, 212
1857	34, 353, 133	2, 647, 470	69, 132, 101
1858	35, 208, 932	2, 860, 034	73, 195, 685
1859	34, 328, 876	2, 015, 859	76, 863, 661
1860	35, 497, 960	3, 230, 978	76, 816, 394
1861	35, 202, 040	3, 407, 672	77, 927, 750
1862	34, 451, 700	3, 622, 483	78, 793, 977
1863	32, 763, 095	3, 712, 231	85, 183, 280
1864	31, 360, 450	3, 862, 273	88, 590, 235
1865	30, 511, 109	3, 826, 425	97, 834, 874
1866	30, 630, 236	4, 053, 133	102, 265, 531
1867	31, 282, 023	4, 228, 554	110, 988, 209
1868	30, 356, 818	5, 115, 766	106, 815. 262
1869	28, 839, 100	5, 701, 880	111, 726, 491
1870	30, 330, 572	6, 153, 983	117, 551, 152
1871	30, 662, 023	7, 252, 035	123, 401, 889

TABLE B.—*The consumption in Great Britain of coffee, cocoa, and tea, &c.*—Continued.

Years.	Coffee.	Cocoa.	Tea.
	Pounds.	*Pounds.*	*Pounds.*
1872	31, 173, 555	7, 771, 763	127, 661, 360
1873	31, 791, 332	8, 284, 260	131, 881, 470
1874	31, 249, 368	8, 854, 690	137, 279, 891
1875	32, 078, 018	9, 957, 610	145, 327, 432
1876	32, 894, 400	10, 399, 522	149, 104, 194
1877	32, 286, 016	10, 043, 605	151, 114, 886
1878	32, 835, 552	9, 996, 290	157, 396, 661
1879	34, 072, 032	10, 076, 504	160, 432, 284
1880	31, 868, 480	10, 566, 150	158, 570, 842
1881	31, 208, 240	10, 897, 795	160, 225, 911
1882	31, 178, 560	11, 996, 850	165, 079, 881

TABLE C.—*Coffee imports from British possessions.*

Years.	British East Indies.	Ceylon.	Singapore.	Mauritius.	South Africa.	Aden.	British West Indies.	British Honduras.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
1856..	4, 470, 928	34, 969, 017	550, 386	....	15, 082	....	2, 130, 784	....
1857..	3, 625, 551	32, 777, 053	63, 393	....	71, 000	....	3, 054, 028	....
1858..	2, 831, 586	43, 755, 163	165, 523	....	11, 967	853, 792	2, 961, 443	....
1859..	5, 088, 405	42, 364, 978	1, 703, 890	....	1, 465	1, 244	8, 576, 549	....
1860..	6, 035, 515	59, 322, 797	1, 527, 332	....	70, 168	585	2, 831, 010	....
1861..	7, 560, 462	53, 505, 973	1, 482, 403	....	586, 000	....	4, 431, 369	....
1862..	10, 470, 746	55, 285, 723	3, 547, 747	....	18, 000	....	3, 545, 405	....
1863..	10, 740, 619	79, 793, 201	1, 620, 477	....	37, 000	25	5, 486, 262	....
1864..	17, 131, 620	69, 011, 290	1, 253, 020	....	48, 000	68, 277	2, 466, 488	....
1865..	15, 927, 100	90, 458, 468	1, 665, 947	160	88, 000	....	4, 022, 954	105, 440
1866..	13, 096, 176	81, 428, 370	971, 524	1, 353	401, 213	5, 355	4, 514, 929	166, 545
1867..	14, 001, 622	83, 472, 850	2, 301, 814	468, 578	681, 959	100	2, 655, 029	196, 681
1868..	23, 628, 887	101, 929, 158	3, 367, 006	383, 766	265, 100	....	6, 288, 987	216, 942
1869..	21, 318, 222	95, 103, 970	2, 678, 006	1, 003, 627	413, 336	11, 487	3, 675, 022	277, 950
1870..	19, 523, 616	97, 964, 944	1, 670, 704	195, 324	418, 096	36, 288	7, 138, 096	507, 808
1871..	33, 412, 073	90, 680, 576	2, 843, 232	231, 504	357, 728	299, 040	4, 235, 952	169, 792
1872..	29, 900, 080	72, 664, 816	1, 009, 568	6, 384	286, 608	156, 800	6, 607, 328	295, 120
1873..	18, 415, 376	95, 190, 032	4, 145, 232	112	41, 552	182, 672	6, 572, 720	182, 112
1874..	22, 521, 184	60, 644, 304	3, 381, 840	298, 480	42, 896	674, 464	7, 556, 976	445, 200
1875..	16, 629, 312	84, 006, 150	2, 238, 656	36, 400	224	1, 686, 496	6, 194, 098	535, 014
1876..	21, 703, 024	56, 559, 104	3, 640, 000	224	286, 832	1, 081, 584	7, 049, 854	697, 088
1877..	17, 912, 384	87, 332, 448	2, 318, 848	336	530, 384	1, 876, 320	7, 597, 856	815, 920
1878..	19, 229, 264	56; 678, 496	1, 598, 640	12, 320	1, 060, 670	1, 458, 776	6, 336, 288	561, 568
1879..	21, 382, 144	69, 941, 088	548, 800	758, 912	13, 664	2, 288, 384	8, 090, 656	1, 216, 992
1880..	25, 952, 080	60, 452, 784	3, 236, 688	703, 248	485, 072	1, 540, 448	7, 887, 376	386, 288

TABLE D.—*Coffee imports from foreign countries into Great Britain.*

Years.	Central America.	New Granada.	Venezuela.	Hayti and Saint Domingo.	Dutch West Indies.	Cuba and Porto Rico.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
1856	3, 627, 677	....	49, 549	672, 819	....	1, 688
1857	4, 560, 555	....	233, 018	553, 372	....	13, 222
1858	1, 713, 142	....	187, 359	390, 880	....	59, 295
1859	1, 715, 684	....	148, 905	492, 561	....	608, 240
1860	3, 459, 668	502, 594	1, 956	111, 452	....	11, 068
1861	3, 232, 987	65, 904	458	102, 835	....	19, 160
1862	4, 016, 915	373, 751	421	335, 695	....	2, 806
1863	3, 239, 149	1, 574, 439	785	3, 469, 929	....	19, 934
1864	3, 701, 900	997, 372	291, 787	952, 987	....	35, 684
1865	5, 278, 604	2, 580, 452	44, 016	1, 736, 213	....	383, 013
1866	7, 160, 387	2, 981, 816	145, 303	2, 223, 177	....	521, 051
1867	7, 302, 359	4, 829, 459	123	1, 262, 111	....	270, 223
1868	10, 183, 146	6, 295. 386	965	720, 045	....	381, 904
1869	12, 649, 706	3, 215, 396	23, 276	3, 013, 854	....	4, 068
1870	14, 020, 112	8, 592, 672	170, 116	4, 270, 672	....	1, 916, 526
1871	19, 544, 560	2, 660, 448	76, 608	3, 448, 592	....	458, 192
1872	14, 923, 598	3, 031, 168	195, 552	7, 365, 008	....	3, 472
1873	23, 144, 640	1, 888, 992	1, 196, 720	5, 555, 312	....	23, 296
1874	16, 972, 256	2, 433, 088	880, 656	5, 676, 608	....	1, 132, 086
1875	23, 629, 648	1, 640, 352	242, 144	8, 654, 688	2, 744	739, 984
1876	14, 365, 344	3, 265, 920	294, 448	7, 763, 616	....	3, 356, 640
1877	25, 609, 808	1, 330, 000	220, 304	3, 806, 544	....	659, 680
1878	17, 417, 568	1, 827, 840	544, 096	2, 866, 416	....	329, 056
1879	29, 179, 024	2, 261, 952	243, 926	787, 360	49, 280	1, 752, 016
1880	23, 454, 816	1, 918, 113	427, 504	961, 968	16, 128	1, 771, 280

9 JUL 83

TABLE D.—*Coffee imports from foreign countries into Great Britain*—Continued.

Years.	Brazil.	Mexico.	Chili.	United States.	Manila.	Java.	Egypt.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
1856	9, 126, 656	....	118, 394	....	....	265	90, 049
1857	6, 747, 630	....	68	....	....	953	147, 370
1858	3, 145, 954	....	22, 714	....	....	280	2, 835
1859	4, 675, 700	....	288	....	....	995	12, 877
1860	6, 236, 398	....	131, 766	....	89, 271	92, 323	468, 859
1861	10, 315, 538	....	....	12, 282	240, 784	69, 270	597, 614
1862	13, 080, 877	....	....	591, 807	418, 957	1, 472	371, 605
1863	9, 409, 720	....	....	122, 049	636, 646	311	131, 366
1864	8, 959, 025	....	....	3, 562, 453	81, 899	262	24, 827
1865	10, 959, 553	....	....	25, 774	3, 082, 091	....	80, 892
1866	9, 261, 491	....	....	1, 873, 561	726, 978	....	375, 121
1867	17, 442, 125	....	....	302, 105	746, 717	258, 086	543, 257
1868	15, 882, 501	....	....	227, 169	2, 067, 882	791, 623	560, 134
1869	22, 267, 953	....	....	364, 369	4, 199, 564	1, 581	278, 029
1870	14, 057, 393	....	....	902, 832	1, 400, 326	344, 978	1, 060, 752
1871	23, 066, 400	....	....	1, 352, 400	2, 867, 760	224	1, 869, 392
1872	17, 829, 840	....	....	280, 832	2, 437, 344	672	1, 825, 486
1873	16, 099, 888	....	....	1, 657, 040	3, 056, 704	259, 056	2, 978, 640
1874	22, 413, 880	....	....	1, 049, 216	2, 632, 672	1, 059, 296	507, 248
1875	24, 906, 000	....	....	1, 128, 400	2, 267, 168	1, 232	206, 416
1876	22, 912, 960	1, 393, 840	....	3, 074, 512	625, 856	64, 064	47, 040
1877	20, 967, 520	408, 240	....	1, 619, 296	1, 110, 032	448	124, 432
1878	22, 537, 984	163, 744	....	2, 892, 176	343, 504	4, 256	95, 872
1879	28, 677, 488	500, 640	....	4, 362, 624	21, 392	672	138, 820
1880	28, 946, 960	307, 328	....	5, 246, 304	524, 048	2, 688	160, 272

Total imports and exports of coffee into and from Great Britain.

Years.	Quantities.		Values.	
	Import.	Export.	Import.	Export.
	Pounds.	*Pounds.*		
1856	56, 992, 116	27, 602, 836	£1, 498,108	£712, 212
1857	58, 892, 726	15, 782, 710	1, 720, 465	466, 894
1858	60, 697, 265	25, 761, 314	1, 742, 252	785, 175
1859	65, 353, 030	29, 586, 054	1, 955, 592	877, 295
1860	82, 797, 746	45, 661, 520	2, 543, 307	1, 440, 089
1861	83, 532, 425	46, 800, 365	2, 628, 776	1, 461, 278
1862	94, 041, 883	56, 899, 830	3, 303, 387	1, 967, 730
1863	117,354, 217	70, 385, 233	4, 153, 330	2, 530, 684
1864	109, 277, 382	71, 309, 279	3, 606, 286	2, 590, 427
1865	137, 997, 440	79, 884, 182	4, 600, 887	3, 249, 534
1866	127, 044, 848	99, 655, 344	4, 098, 329	3, 060, 577
1867	137, 729, 760	94, 595, 904	4, 362, 760	3, 035, 267
1868	173, 902,512	135, 066, 288	4, 858, 107	3, 740, 373
1869	173, 416, 320	128, 152, 640	4, 927, 805	3, 644, 055
1870	179, 901, 904	144, 821, 264	4, 942, 769	3, 936, 268
1871	191, 992, 304	172, 648, 896	5,394, 511	4, 682, 332
1872	166, 269, 040	158, 669, 728	5, 257, 403	4, 606, 674
1873	183, 402, 576	154,499, 184	7, 230, 351	5, 822, 333
1874	157, 351, 376	120, 935, 808	7, 064, 788	5, 233, 684
1875	178, 049, 984	135, 274, 944	7, 513, 053	5, 690, 117
1876	152, 503, 904	137, 176, 256	6, 377, 829	5, 791, 656
1877	180, 127,584	124, 506,256	7, 768, 928	5, 200, 814
1878	142, 203, 824	114, 835, 380	5, 918, 481	4, 732, 210
1879	180, 251, 232	144, 736, 928	7, 089, 100	5, 830, 092
1880	173, 202, 512	133, 187, 488	6, 861,130	5, 258, 446
1881	137, 648,396	108, 163, 785	4, 761, 369	4, 081, 045
1882	152, 204, 391	111, 621,972	5, 188, 947	3, 905, 775

Quantities imported, exported, and retained for home consumption during each quinquennial period.

Years.	Import.	Export.	Stock and consumption.
	Pounds.	*Pounds.*	*Pounds.*
1851-1855	294, 242, 740	122, 662, 948	177, 578, 587
1856-1860	324, 732, 883	147, 394, 434	174, 384, 835
1861-1865	542, 203, 407	354, 278, 889	164, 288, 394
1866-1870	791, 995, 304	600, 291, 440	151, 338, 749
1871-1875	877, 865, 728	742, 028, 560	136, 954, 294
1876-1880	828, 259, 056	654, 442, 208	163, 956, 970
1881	137, 648, 336	108, 164, 784	29, 473, 552
1882	153, 324, 192	(†)	(*)

*The quantity taken for home consumption in 1882, and on which duty has been paid, was 31,962,780 pounds.

REDISTRIBUTION OF IMPORTED COFFEE.

TABLE F.—*Statement of the export of coffee from Great Britain to other European countries showing the progress of 25 years.*

Years.	France.	Germany.	Netherlands.	Belgium.	Scandinavia.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
1856-'60	5, 461, 457	42, 109, 221	35, 094, 688	11, 537, 767	5, 333, 491
1861-'65	54, 234, 468	80, 729, 903	100, 460, 763	22, 909, 298	7, 445, 574
1866-'70	94, 315, 523	114, 816, 603	218, 374, 198	41, 578, 081	23, 379, 414
1871-'75	58, 103, 585	172, 074, 896	254, 783, 796	59, 273, 984	50, 702, 048
1876-'80	47, 344, 640	154, 649, 086	203, 304, 752	63, 063, 840	57, 823, 032
1881	4, 762, 352	26, 456, 220	31, 840, 480	8, 163, 680	11, 292, 452
1882*	....	....	....	....	....

Years.	Russia.	Italy.	Turkey, Greece, Roumania.	Austria.	Spain.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
1856-'60	15, 632, 142	....	....	....	....
1861-'65	27, 387, 748	7, 880, 878	11, 426, 438	8, 282, 492	....
1866-'70	38, 695, 490	12, 871, 487	14, 587, 430	5, 707, 118	....
1871-'75	48, 890, 688	18, 107, 152	25, 723, 152	8, 233, 792	2, 439, 472
1876-'80	29, 067, 024	15, 099, 992	20, 211, 743	9, 415, 792	2, 208, 528
1881	4, 762, 352	5, 465, 152	3, 390, 576	1, 647, 744	....
1882*	....	....	....	....	....

*Not yet recorded.

THE CONSUMPTION OF COFFEE IN EUROPE.

TABLE G.—*Statement of the average annual consumption of coffee as supplied to the under-mentioned countries, distinguishing the average total number of pounds' weight and the proportion per head of population.*

Countries.	1867 to 1871.		1872 to 1876.		1877 to 1881.	
	Average of five years.	Proportion per head of population.	Average of five years.	Per head of population.	Average of five years.	Per head of population.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
France	117, 058, 000	3. 01	88, 760, 000	2. 47	123, 715, 000	3 25
Germany	140, 060, 000	4. 87	214, 818, 000	5. 20	222, 239, 000	4 94
Netherlands	74, 807, 000	13. 56	67, 802, 400	15. 50	69, 045, 200	16. 33
Belgium	45, 263, 500	9. 43	48, 069, 400	9. 62	51, 767, 800	9. 41
Norway	12, 862, 300	7. 56	14, 706, 900	....	15, 618, 400	....
Sweden	15, 931, 600	4. 14	20, 472, 700	4. 99	24, 011, 400	5. 30

TABLE G.—*Statement of the average annual consumption of coffee, &c.*—Continued.

Countries.	1867 to 1871.		1872 to 1876.		1877 to 1881.	
	Average of five years.	Proportion per head of population.	Average of five years.	Per head of population.	Average of five years.	Per head of population.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pouuds.*
Denmark	8, 159, 600	....	9, 969, 200	....	9, 194, 600	....
Russia	14, 227, 600	....	16, 342, 400	....	15, 995, 000	....
Switzerland	18, 059, 000	7. 00	18, 477, 100	6. 10	19, 345, 300	6. 98
Italy	27, 859, 900	1. 11	28, 371, 200	1, 07	29, 874, 200	1. 06
Austria-Hungary	55, 303, 400	1. 73	71, 931, 900	2. 00	70, 578, 200	1. 90
Spain, Portugal, Turkey, Greece, and Balkan	5, 000, 000	....	5, 800, 000	....	8, 200, 000	....
Total	534, 531, 900	3. 70	605, 525, 200	3. 90	659, 584, 100	3. 88
Great Britain	30, 266, 774	1. 00	31, 390, 859	0. 94	32, 791, 394	0. 93
Total Europe	554, 798, 674	3. 16	636,916, 059	3. 41	692, 375, 494	3. 37
United States of America	250, 726, 500	7. 90	307, 886, 360	7. 69	384, 283, 800	7. 01

TABLE H.—*Statement showing the relative proportion of consumption of coffee in Great Britain and other European countries compared with the United States of America.*

Countries.	1866–'70.	1871–'75.	1876–'80.
	Pounds.	*Pounds.*	*Pounds.*
Great Britain:			
Imports	791, 995, 300	877, 065, 728	828, 259, 000
Re-exports	600,291,400	742, 028, 560	654, 442, 200
Retained for consumption	191, 703, 900	135, 037, 200	173, 846,800
The European countries, except Russia, Spain, Portugal, and Turkey:			
Details as per tables in round numbers	2, 660, 000, 000	2,900,000,000	3,150, 000, 000
Average per annum	532, 000,000	580, 000,000	630, 000,000
United States of America:			
Total import	1, 253, 631,700	1, 539, 431, 800	1, 921, 419,000
Average per annum each five years	250, 726, 530	307, 886, 360	384, 283, 100

TABLE I.—*The consumption of coffee in Europe and the United States of America, distinguishing the totals and the percentage of supply during, sixteen years.*

Years.	Europe.	United States.	Total.	Proportion to Europe.	Proportion to United States.
	Pounds.	*Pounds.*	*Pounds.*	*Per cent.*	*Per cent.*
1866	432, 978, 744	174, 281, 000	607, 279, 744	71. 3	28. 7
1867	501, 851, 056	187, 237, 000	693, 188, 056	73. 0	27. 0
1868	358, 538, 724	208, 984, 000	747, 522, 724	72. 0	28. 0
1869	552, 807, 580	264, 164, 000	816, 969, 080	67. 6	32. 4
1870	567, 568, 924	235, 257, 500	802, 826, 124	70. 7	29. 3
1871	519, 565, 956	317, 992, 200	867, 557, 956	63. 3	36. 7
1872	495, 135, 700	298, 806, 000	793, 941, 700	62. 0	38. 0
1873	678, 176, 592	293, 883, 900	967, 060, 492	70. 0	30. 0
1874	583, 901, 468	285, 271, 700	879, 173, 168	67. 4	32. 6
1875	733, 152, 240	321, 970, 800	1, 055, 122, 040	70. 0	30. 0
1876	648, 961, 448	341, 809, 200	990, 050, 648	65. 5	34. 5
1877	677, 007, 628	331, 639, 000	1, 008, 646, 628	67. 0	33. 0
1878	703, 342, 944	309, 882, 300	1, 014, 225, 144	69. 3	30. 5
1879	689, 001, 200	377, 848, 000	1, 066, 849, 200	64. 6	35. 4
1880	680, 009, 400	446, 851, 000	1, 126, 860, 400	60. 5	39. 5
1881	763, 635, 900	455, 190, 000	1, 218, 826, 000	62. 6	37. 4

JAMAICA.

TABLE J.—*Exports of coffee from Jamaica.*

Years.	Quantity.	Value in English money.	Value in American money.
	Pounds.		
1850	6, 264, 472	£118, 603	$593, 015
1851	5, 594, 585	102, 252	511, 260
1852	5, 584, 573	98, 026	490, 130
1853	4, 822, 651	80, 519	402, 595
1854	6, 122, 866	109, 653	547, 765
1855	5, 666, 202	96, 191	480, 955
1856	3, 721, 720	83, 021	415, 125
1857	6, 761, 075	146, 162	730, 810
1858	5, 943, 708	97, 257	486, 285
1859	5, 055, 089	91, 514	457, 570
1860	6, 176, 598	113, 848	569, 240
1861	6, 715, 500	151, 061	755, 305
1862	5, 467, 302	162, 727	813, 635
1863	8, 184, 849	177, 839	889, 195
1864	4, 141, 903	111, 748	558, 740
1865	6, 229, 712	159, 499	799, 995
1866	8, 513, 532	188, 864	944, 320
1867	6, 264, 861	172, 816	864, 080
1868	7, 855, 488	169, 774	848, 870
1869	5, 501, 887	129, 984	649, 920
1870	9, 671, 564	237, 990	1, 189, 950
1871	5, 611, 245	150, 301	751, 505
1872	9, 510, 739	252, 358	1, 261, 790
1873	7, 199, 144	214, 055	1, 070, 275
1874	10, 351, 570	838, 165	1, 690, 825
1875	7, 136, 327	219, 092	1, 095, 460
1876	8, 707, 552	270, 066	1, 350, 330
1877	9, 532, 887	270, 960	1, 354, 800
1878	9, 572, 714	274, 676	1, 373, 380
1879	10, 833, 867	249, 175	1, 245, 875
1880	10, 188, 397	254, 722	1, 273, 610

RECAPITULATION.

1851-'55	27, 790, 877	486, 541	2, 432, 705
1856-'60	27, 658, 190	531, 806	1, 659, 030
1861-'65	30, 739, 266	763, 374	3, 816, 870
1866-'70	37, 807, 332	899, 428	4, 497, 140
1871-'75	39, 808, 425	1, 173, 971	5, 869, 855
1876-'80	48, 835, 917	1, 219, 599	6, 597, 995

AVERAGE FOR EACH YEAR.

1851-'55	5, 558, 175	97, 308	486, 541
1856-'60	5, 531, 638	106, 361	531, 806
1861-'65	6, 147, 853	152, 675	763, 374
1866-'70	7, 561, 466	179, 885	899, 428
1871-'75	7, 961, 686	234, 794	1, 173, 911
1876-'80	9, 767, 183	263, 920	1, 319, 599

CEYLON.

TABLE K.—*Statement of the shipment of coffee, the produce of the island of Ceylon, distinguishing the decrease in both plantation and native produce.*

	Plantation.		Native.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cwts.		*Cwts.*		*Cwts.*	
1850		£279, 112				
1851		350, 585				
1852		374, 031				
1853		328, 972				
1854		408, 895				
1855		506, 732				
1856	312, 435	725, 809	133, 135	£266, 584	445, 570	$4, 958, 965
1857	431, 241	1, 127, 299	172, 204	372, 837	603, 415	7, 500, 670
1858	354, 567	957, 330	190, 068	380, 136	544, 635	6, 687, 330
1859	411, 562	1, 111, 221	178, 436	356, 872	590, 000	7, 340, 460
1860	477, 606	1, 289, 537	154, 843	309, 687	632, 449	7, 997, 120
1861	517, 499	1, 397, 248	132, 818	265, 626	650, 317	8, 314, 370
1862	478, 634	1, 292, 312	127, 075	254, 149	605, 709	7, 732, 305
1863	670, 068	1, 809, 186	158, 517	317, 034	828, 585	10, 631, 100
1864	576, 315	1, 555, 513	95, 548	190, 897	671, 863	8, 732, 050
1865	695, 934	1, 874, 012	233, 268	468, 044	929, 202	11, 735, 280
1866	701, 189	1, 901, 309	195, 291	390, 583	896, 490	11, 459, 460
1867	776, 218	2, 095, 788	167, 374	334, 748	943, 592	12, 152, 680
1868	784, 889	2, 119, 202	222, 590	445, 181	1, 007, 479	12, 821, 915
1869	792, 569	2, 139, 987	127, 643	254, 286	920, 212	11, 971, 345
1870	921, 506	2, 488, 082	132, 524	264, 923	1, 054, 030	13, 765, 025
1871	775, 454	2, 093, 667	170, 396	338, 760	945, 850	12, 157, 135
1872	582, 432	1, 572, 468	140, 623	281, 246	723, 055	9, 268, 570
1873	830, 261	3, 736, 176	122, 077	488, 311	952, 333	21, 122, 435
1874	635, 983	2, 683, 055	97, 020	341, 088	733, 003	15, 120, 715
1875	813, 401	3, 812, 817	115, 205	430, 021	928, 606	21, 214, 190
1876	586, 580	2, 914, 573	80, 585	302, 194	667, 165	16, 083, 835
1877	896, 534	4, 370, 603	82, 281	316, 268	978, 815	23, 434, 355
1878	586, 917	3, 026, 292	46, 237	164, 719	633, 154	15, 955, 055
1879	725, 325	3, 603, 958	54, 414	173, 445	779, 739	18, 887, 015
1880	611, 842	2, 982, 938	45, 753	142, 650	657, 595	15, 641, 940
1881						

RECAPITULATION.

Periods.	Plantation coffee.	Native coffee.	Total quantity.	Total value.
	Cwts.	*Cwts.*	*Cwts.*	
1856–'60	1, 987, 381	828, 686	2, 816, 067	$34, 483, 560
1861–'65	2, 938, 450	747, 226	3, 685, 676	47, 145, 105
1866–'70	3, 976, 371	845, 423	4, 321, 798	62, 173, 325
1871–'75	3, 657, 531	645, 315	4, 302, 846	78, 853, 045
1876–'86	3, 407, 198	309, 270	3, 716, 468	90, 002, 200

AVERAGE FOR EACH YEAR.

1856–'60	397, 476	165, 737	568, 213	6, 896, 712
1861–'65	587, 690	149, 445	737, 135	9, 429, 021
1866–'70	795, 274	169, 084	964, 350	12, 434, 665
1871–'75	531, 526	129, 063	860, 569	15, 770, 609
1876–'80	681, 440	61, 854	743, 294	18, 000, 440

BRITISH INDIA.

TABLE L.—*Exports of coffee from British India.*

Years.	Quantity.	Value in English money.	Value in American money.
	Pounds.		
1852	8,714,500	£48,307	$241,537
1853	7,865,600	47,485	237,425
1854	7,787,800	109,762	548,810
1855	7,411,900	82,804	414,020
1856	9,206,100	120,201	501,005
1857	10,117,000	132,819	664,095
1858	6,123,800	99,727	498,635
1859	11,693,200	135,036	675,180
1860	14,345,800	188,532	942,660
1861	19,119,000	332,485	1,662,475
1862	21,505,100	467,991	2,339,955
1863	21,045,700	513,257	2,566,285
1864	26,752,900	657,672	3,288,360
1865	32,287,900	801,908	4,009,540
1866	34,700,200	788,102	3,940,510
1867	17,641,100	414,217	2,071,085
1868	31,812,300	761,395	3,806,975
1869	48,036,800	1,121,032	5,605,160
1870	36,493,100	870,189	4,350,945
1871	33,816,700	809,701	4,048,505
1872	56,817,200	1,380,410	6,902,050
1873	42,099,300	1,146,219	5,731,095
1874	41,118,800	1,499,498	7,497,490
1875	35,041,900	1,307,919	6,539,590
1876	41,831,900	1,633,395	8,166,693
1877	34,065,700	1,353,588	6,767,940
1878	33,446,100	1,394,638	6,973,190
1879	38,234,900	1,548,481	7,742,405
1880	40,436,900	1,633,032	8,165,160
1881	41,519,200	1,602,594	8,012,995

RECAPITULATION.

Years.	Quantity.	Value in English money.	Value in American money.
1852-'56	40,935,900	408,559	2,042,775
1857-'61	61,398,800	888,599	4,442,945
1862-'66	136,291,800	3,228,930	16,149,650
1867-'71	167,800,000	3,976,534	19,882,670
1872-'76	216,909,100	6,967,441	34,837,205
1877-'81	187,697,600	7,532,343	37,661,690

AVERAGE OF EACH YEAR.

Years.	Quantity.	Value in English money.	Value in American money.
1852-'56	8,187,180	....	408,555
1857-'61	12,379,760	....	885,589
1862-'66	27,258,360	....	3,229,930
1867-'71	33,560,000	....	6,976,534
1872-'76	43,381,820	....	7,532,343
1877-'80	37,539,520	....	....

THE UNITED STATES.

TABLE M.—*Imports of coffee into the United States.*

Years.	Quantities.	Value.
	Pounds.	*Dollars.*
1866	174,281,000	19,729,281
1867	187,237,000	20,696,259
1868	248,984,000	25,288,451
1869	264,161,500	24,531,743
1870	235,257,200	24,234,879
1871	317,992,000	30,992,869
1872	293,806,000	37,942,225

TABLE M.—*Imports of coffee into the United States*—Continued.

Years.	Quantities.	Value.
	Pounds.	*Dollars.*
1873	293, 298, 000	44, 103, 814
1874	285, 271, 700	55, 040, 965
1875	321, 970, 800	50, 591, 488
1876	340, 089, 000	56, 788, 997
1877	331, 689, 000	53, 624, 991
1878	309, 882, 000	51, 914, 000
1879	377, 848, 000	47, 357, 000
1880	446, 851, 000	60, 361, 000
1881	455, 190, 000	56, 784, 000

RECAPITULATION.

1867-'71	1, 253, 631, 700	125, 744, 201
1872-'76	1, 539, 431, 800	244, 467, 484
1877-'81	1, 921, 419, 000	270, 050, 991

AVERAGE DURING EACH YEAR.

1867-'71	250, 726, 530	125, 744, 201
1872-'76	307, 886, 360	244, 467, 484
1877-'81	384, 283, 800	270, 050, 991

AVERAGE PERCENTAGE PER HEAD OF POPULATION.

1867-'71	7. 90 pounds.	8. 30. 9 cents.
1872-'76	7. 69 pounds.	6. 11. 2 cents.
1877-'81	7. 01 pounds.	5. 40. 0 cents.

FRANCE.

The fluctuations in regard to the consumption of coffee have been somewhat violent in consequence of the war, but now the old rate per capita has again been resumed, namely, a fraction over 3 pounds.

TABLE NO. 1.—*Imports of coffee into France for home consumption.*

Years.	Quantities.		Values.	
	Kilograms.	Pounds.	Francs.	Dollars.
1861	37, 580, 000	82, 676, 000	68, 200, 000	13, 640, 000
1862	27, 791, 000	83, 140, 200	76, 000, 000	16, 200, 000
1863	39, 701, 000	87, 392, 000	79, 800, 000	15, 960, 000
1864	40, 457, 000	89, 005, 000	83, 400, 000	16, 680, 000
1865	43, 501, 000	95, 703, 200	85, 400, 000	17, 080, 000
1866	44, 841, 000	98, 650, 000	79, 100, 000	15, 520, 000
1867	47, 261, 000	103, 985, 000	71; 600, 000	14, 320, 000
1868	52, 303, 000	115, 066, 600	73, 900, 000	14, 780, 000
1869	50, 328, 000	110, 721, 600	73, 700, 000	14, 740, 000
1870	76, 010, 000	167, 223, 600	105, 000, 000	23, 000, 000
1871	40, 129, 000	88, 293, 800	64, 700, 000	12, 940, 000
1872	16, 708, 000	36, 757, 000	31, 400, 000	6, 280, 000
1873	44, 834, 000	98, 686, 000	99, 500, 000	19, 900, 000
1874	38, 709, 000	85, 159, 000	88, 256, 000	17, 651, 000
1875	48, 013, 000	105, 628, 000	105, 159, 000	21, 029, 000
1876	53, 487, 000	117, 671, 000	108, 000, 000	21, 600, 000
1877	47, 811, 000	105, 184, 000	99, 000, 000	19, 800, 000
1878	54, 105, 000	119, 031, 000	101, 176, 000	20, 235, 200
1879	56, 526, 000	125, 017, 000	101, 150, 000	20, 230, 000
1880	57, 733, 000	127, 012, 000	97, 569, 000	19, 513, 800
1881	64, 696, 000	142, 331, 000	97, 691, 000	19, 538, 200

TABLE No. 1.—*Imports of coffee in France, &c.*—Continued..

RECAPITULATION.

Years.	Quantities.		Values.	
	Kilograms.	Pounds.	Francs.	Dollars.
1861-'66		453, 840, 000		80, 744, 000
1867-'71		585, 290, 000		79, 780, 000
1872-'76		443, 822, 000		86, 461, 000
1877-'81		618, 576, 000		97, 317, 000

AVERAGE FOR EACH YEAR.

1861-'66		90, 768, 000		16, 140, 800
1867-'71		117, 058, 000		15, 956, 000
1871-'76		88, 764, 000		17, 292, 200
1877-'81		123, 715, 000		19, 863, 400

PROPORTION PER HEAD OF POPULATION.

				Cents.
1861-'66		2. 42		43. 15
1867-'71		3. 01		43. 84
1872-'76		2. 47		48. 01
1877-'81		3. 25		52. 10

GERMANY.

There are no statistics available prior to the date of the present empire. As the free city of Hamburg is the central depot for the coffee trade of Germany and Central Europe a special table of her imports is given. Despite competition, caused by increased railway facilities between other shipping ports along the North Sea, Hamburg has not only held her former position, but has considerably augmented her operations in coffee, chiefly with Brazil and some of the West Indian possessions.

Imports of coffee into Germany for domestic use.

Years.	Quantities.		Values.	
	Centners.	Pounds.	Marks.	Dollars.
[illegible]	1, 855, 367	204, 090, 000	136, 500, 000	34, 125, 000
[illegible]	1, 965, 261	216, 178, 700	177, 000, 000	44, 250, 000
[illegible]	1, 800, 830	198, 091, 300	167, 400, 000	41, 850, 000
[illegible]	2, 015, 000	221, 650, 000	199, 000, 000	49, 750, 000
[illegible]	2. 128, 000	234, 080, 000	192, 000, 000	48, 000, 000
[illegible]	1, 916, 300	210, 793, 000	172, 000, 000	43, 000, 000
[illegible]	1, 988, 300	218, 713, 000	169, 000, 000	42, 250, 000
[illegible]	2, 229, 700	245, 267, 000	190, 000, 000	47, 500, 000
[illegible]	1, 884, 400	207, 284, 000	159, 750, 000	37, 687. 500
[illegible]	2, 083, 100	229, 141, 000	135, 400, 000	33, 850, 000

RECAPITULATION.

	Pounds.	*Dollars.*
1872-'76	1, 074, 090, 000	217, 975, 000
1877-'81	1, 111, 198, 000	204, 287, 000

Imports of coffee into Germany for domestic use—Continued.

AVERAGE FOR EACH YEAR.

	Pounds.	*Dollars.*
1872–'76	214, 818, 000	43, 595, 000
1877–'81	202, 239, 600	40, 857, 400

PROPORTION PER HEAD OF POPULATION.

1872–'76	5. 24 pounds	106. 2 cents.
1877–'81	4. 94 pounds	90. 9 cents.

TABLE NO. 2 —*Imports of coffee into Hamburg.*

Years.	Quantities.		Values.	
	Centners.	Pounds.	Marks.	Dollars.
1866	826, 961	90, 915, 700	50, 355, 000	12, 571, 000
1867	1, 092, 612	120, 187, 300	59, 553, 000	14, 888, 250
1868	1, 262, 277	138, 851, 700	60, 891, 000	15, 222, 750
1869	1, 353, 807	148, 918, 000	70, 050, 000	17, 512, 500
1870	1, 085, 948	119, 453, 400	54, 606, 000	13, 651, 500
1871	1, 454, 309	159, 974, 000	81, 264, 000	20, 316, 000
1872	1, 276, 325	140, 393, 000	93, 320, 000	23, 330, 000
1873	1, 595, 678	175, 524, 000	141, 524, 000	35, 381, 000
1874	1, 563, 000	171, 930, 000	145, 416, 000	36, 354, 000
1875	1, 737, 000	191, 070, 000	156, 897, 000	39, 224, 250
1876	1, 761, 000	193, 710, 000	140, 650, 000	36, 662, 500
1877	1, 825, 000	201, 850, 000	157, 938, 000	39, 434, 500
1878*	1, 881, 000	206, 910, 000	140, 512, 000	35, 128, 000
1879	2, 052, 000	225, 720, 000	139, 751, 000	34, 437, 500
1880	2, 027, 000	222, 970, 000	145, 066, 000	36, 266, 500
1881	2, 338, 000	357, 180, 000	145, 492, 000	36, 373, 000

RECAPITULATION.

	Pounds.	*Dollars.*
1867–'71	673, 384, 400	81, 591, 000
1872–'76	872, 627, 000	170, 951, 000
1877–'81	1, 114, 630, 000	182, 189, 000

AVERAGE FOR EACH YEAR.

1867–'71	134, 671, 658	16, 318, 200
1872–'76	174, 525, 400	34, 190, 200
1877–'81	222, 926, 000	36, 437, 800

NETHERLANDS.

The tables distinguish the values and quantities respectively of imports and exports and the stock available for consumption. The estimate per capita must be taken with some degree of consideration. It has not really gone into consumption, but large quantities are kept in bond at the disposal of speculators. Nevertheless, as the inhabitants are

interested in the coffee trade of Java, there is comparatively a larger quantity consumed than in other European countries.

Import and export of coffee, Netherlands.

Years.	Import.	Export.	Stock and consumption.	
			Kilograms.	Pounds.
	Kilograms.	*Kilograms.*		
1863	69, 885, 000	56, 141, 000	13, 745, 000	....
1864	82, 043, 000	66, 919, 000	15, 129, 000	....
1865	78, 061, 000	70, 683, 000	7, 376, 000	....
1866	85, 097, 000	72, 442, 000	12, 655, 000	....
1867	91, 954, 000	71, 088, 000	20, 873, 000	45, 918, 000
1868	96, 584, 000	74, 623, 000	21, 961, 000	48, 314, 000
1869	86, 863, 000	64, 933, 000	21, 430, 000	47, 146, 000
1870	97, 110, 000	79, 584, 000	17, 526, 000	38, 557, 000
1871	103, 754, 000	83, 813, 000	19, 942, 000	43, 872, 000
1872	78, 870, 000	68, 532, 000	10, 538, 000	22, 746, 400
1873	104, 892, 000	68, 803, 000	36, 089, 000	79, 395, 600
1874	83, 958, 000	60, 187, 000	23, 771, 000	52, 296, 800
1875	110, 037, 000	67, 598, 000	42, 439, 000	93, 365, 200
1876	84, 540, 000	73, 992, 000	10, 548, 000	23, 205, 800
1877	110, 620, 000	76, 368, 000	34, 261, 000	75, 374, 200
1878	93, 465, 000	68, 373, 000	25, 945, 000	55, 202, 900
1879	95, 935, 000	69, 990, 000	25, 092, 000	52, 079, 000
1880	96, 583, 000	66, 594, 000	29, 989, 000	65, 975, 800
1881	94, 094, 000	61, 902, 000	32, 192, 000	73, 022, 400

RECAPITULATION.

	Export.	Stock and consumption.
	Kilograms.	*Pounds.*
1867–'71	374, 035, 000	223, 807, 000
1872–'76	339, 012, 000	271, 010, 000
1877–'81	345, 237, 000	326, 654, 000

PROPORTION OF SUPPLY PER CAPITA.

1867–'71	....	13. 56
1872–'76	....	15. 50
1877–'81	....	16. 33

TABLE NO. 3.—*Imports of coffee into the Netherlands, by value.*

Years.	Imports.	Exports.	Stock and consumption.	
			Florins.	Dollars.
	Florins.	*Florins.*		
1872	34, 703, 000	30, 154, 000	4, 549, 000	18, 955, 000
1873	46, 153, 000	30, 273, 000	15, 880, 000	66, 165, 000
1874	36, 941, 000	26, 482, 000	10, 459, 000	43, 575, 000
1875	48, 416, 000	29, 743, 000	18, 673, 000	77, 805, 000
1876	37, 198, 000	32, 557, 000	4, 641, 000	19, 385, 000
1877	48, 677, 000	33, 602, 000	15, 075, 000	62, 810, 000
1878	41, 125, 000	30, 084, 000	11, 041, 000	46, 005, 000
1879	42, 211, 000	30, 796, 000	11, 415, 000	47, 562, 000
1880	42, 497, 000	29, 301, 000	13, 196, 000	54, 993, 000
1881	41, 401, 000	27, 237, 000	14, 164, 000	59, 010, 000

RECAPITULATION.

Years.	Imports.	Exports.	Stock and consumption.	
			Florins.	Dollars.
1872-'76		149, 209, 000		225, 845, 000
1877-'81		151, 030, 000		270, 380, 000

AVERAGE DURING EACH OF THE FIVE YEARS.

1872-'76		29, 841, 800		45, 169, 000
1877-'81		30, 206, 000		54, 076, 000

1872-'76: Proportion of money value, $12. 54.
1877-'81: Expended on coffee per capita, $13.54.

BELGIUM.

This country has a large consumption of coffee. Still, the rate per capita is not necessarily used by the inhabitants, as the border localities of Germany, France, and Holland are largely supplied by the Belgian grocers.

TABLE NO. 4.—*Imports of coffee into Belgium for domestic use.*

Years.	Quantities.		Values.	
	Kilograms.	Pounds.	Francs.	Dollars.
1863				
1864				
1865				
1866	19, 354, 000	42, 578, 800	33, 038, 000	6, 607, 600
1867	21, 492, 000	47, 382, 400	36, 609, 000	7, 321, 800
1868	23, 599, 000	51, 917, 800	32, 178, 000	6, 435, 600
1869	20, 532, 000	45, 170, 400	27, 918, 000	5, 583, 600
1870	22, 440, 000	49, 368, 000	31, 174, 000	6, 234, 800
1871	23, 430, 000	51, 546, 000	38, 336, 000	7, 667, 200
1872	22, 282, 000	49, 020, 000	42, 642, 000	8, 528, 400
1873	22, 623, 000	49, 770, 000	54, 214, 000	10, 842, 800
1874	19, 022, 000	41, 848, 000	45, 183, 000	9, 036, 600
1875	21, 822, 000	48, 162, 000	53, 681, 000	10, 736, 200
1876	26, 473, 000	58, 240, 000	61, 516, 000	12, 303, 200
1877	20 386, 000	44, 849, 000	48, 835, 000	9, 767, 400
1878	23, 079, 000	50, 773, 000	48, 143, 000	9, 628, 600
1879	24, 962, 000	54, 916, 000	45, 097, 000	9, 019, 400
1880	22, 755, 000	50, 061, 000	45, 323, 000	9, 064, 600
1881	23, 864, 000	52, 500, 000	43, 576, 000	8, 715, 200

RECAPITULATION.

1866-'70	107, 417, 000	226, 317, 400	161, 917, 000	32, 383, 400
1871-'75	109, 247, 000	240, 347, 000	234, 056, 000	46, 811, 200
1876-'80	117, 655, 000	258, 839, 000	248, 914, 000	49, 782, 800

AVERAGE TOTAL FOR EACH YEAR.

1866-'70	21, 483, 400	45, 263, 500	32, 383, 400	6, 476, 680
1871-'75	21, 849, 400	48, 069, 400	46, 811, 200	9, 362, 240
1876-'80	23, 531, 000	51, 767, 800	49, 782, 800	9, 956, 560

TABLE No. 4.—*Imports of coffee into Belgium for domestic use*—Continued.

PROPORTION PER CENT. PER HEAD OF POPULATION.

Years.	Quantities.	
	Kilograms.	Pounds.
1866–'70	....	9.430
1871–'75	....	9.620
1876–'80	....	9.410

DENMARK.

There are no statistics issued in Denmark stating the values of imports. There is a small export trade from Denmark, probably confined to the colonies in the arctic regions. The *pro rata* consumption is larger in Denmark in sympathy with all Scandanavian states than elsewhere on the continent of Europe.

TABLE No. 5.—*Imports and exports of coffee, Denmark.*

[Quantities only.]

Years.	Import.	Export.	Stock and consumption.
	Pounds.	*Pounds.*	*Pounds.*
1866	14, 998, 577	5, 770, 077	8, 728, 500
1867	14, 299, 123	5, 290, 690	8, 998, 154
1868	17, 035, 055	4, 483, 825	12, 549, 350
1869	10, 080, 170	5, 724, 968	4, 350, 202
1870	13, 425, 885	7, 258, 920	6, 166, 965
1871	13, 281, 400	5, 998, 559	12, 487, 841
1872	14, 866, 000	7, 671, 639	6, 344, 361
1873	23, 668, 000	7, 401, 679	16, 266, 321
1874	14, 354, 500	9, 151, 786	5, 202, 714
1875	15, 907, 100	6, 362, 384	9, 544, 716
1876	15, 966, 500	6, 767, 341	9, 193, 159
1877	15, 122, 900	6, 901, 378	8, 221, 585
1878	13, 162, 038	4, 925, 262	8, 236, 776
1879	14, 738, 400	4, 032, 428	10, 705, 999
1880	13, 264, 126	3, 648, 398	9, 615, 728

RECAPITULATION.

1866–'70	69, 336, 810	....	....
1871–'75	86, 227, 000	31, 381, 000	49, 845, 900
1876–'80	72, 247, 000	26, 274, 800	45, 973, 200

AVERAGE FOR EACH YEAR.

1866–'70	13, 867, 300	....	....
1871–'75	17, 245, 400	6, 276, 200	9, 969, 200
1876–'80	14, 459, 400	5, 254, 500	9, 194, 600

1871–'75: 6.16 pounds per head of population.
1876–'80: 5.25 pounds per head of population.

NORWAY.

TABLE No. 6.—*Imports of coffee into Norway for domestic use.*

Years.	Quantities.		Values.	
	Centners.	Pounds.	Kroner.	Dollars.
1863	108, 926			
1864	86, 107			
1865	109, 672			
1866	116, 197			
1867	122, 491	13, 352, 500		
1868	115, 594	12, 600, 400		
1869	107, 701	11, 739, 300		
1870	115, 855	12, 627, 400		
1871	128, 381	13, 995, 000		
1872	124, 536	14, 664, 400	9, 509, 000	2, 641, 950
1873	157, 465	17, 123, 600	12, 597, 000	3, 493, 510
1874	89, 786	10, 751, 600	8, 493, 000	2, 414, 500
	Kilograms.			
1875	6, 850, 000	15, 070, 000	11, 752, 000	3, 172, 750
1876	7, 225, 000	15, 895, 000	11, 532, 000	2, 204, 350
1877	7, 392, 000	16, 273, 000	12, 575, 000	3, 493, 050
1878	6, 101, 000	13, 422, 000	8, 663, 000	2, 406, 400
1879	7, 229, 000	15, 903, 500	9, 398, 000	2, 610, 555
1880	7, 167, 000	16, 767, 400	8, 815, 000	2, 448, 600
1881	7, 603, 000	16, 725, 600	7, 983, 000	2, 217, 500

RECAPITULATION.

1867-'71		**64, 313**		
1872-'76		**72, 706**		**14, 927, 080**
1877-'81		**78, 091**		**13, 176, 700**

AVERAGE OF YEAR.

1867-'71		**12, 862, 300**		
1872-'76		**14, 706, 920**		**2, 985, 412**
1877-'81		**15, 618, 380**		**2, 652, 734**

		Per capita.		***Per capita.***
1867-'71		**7. 56**		
1872-'76		**8. 17**		**160 cents.**
1877-'81		**8. 21**		**189 cents.**

SWEEDEN.

TABLE 7.—*Imports of coffee into Sweden for domestic use.*

Years.	Quantities.		Values	
	Skalpund.	Pounds.	Kroner.	Dollars.
1866	15, 207, 400	14, 142, 900		
1867	18, 677, 700	17, 470, 400		
1868	15, 933, 400	14, 818, 400		
1869	16, 983, 100	15, 757, 000		
1870	18, 611, 300	17, 471, 500		
1871	21, 693, 700	19, 245, 400	10, 553, 000	2, 932, 100
1872	19, 336, 000	17, 982, 800	11, 214, 000	3, 115, 000
1873	26, 555, 200	24, 695, 500	20, 447, 000	5, 680, 000
1874	21, 455, 900	19, 853, 300	15, 018, 000	4, 170, 800
1875	23, 337, 000	21, 586, 800	17, 502, 000	4, 861, 550
1876	26, 600, 800	24, 738, 000	18, 620, 000	5, 167, 000
1877	25, 439, 200	23, 885, 700	16, 535, 000	4, 591, 600
1878	24, 920, 400	23, 485, 200	14, 952, 000	4, 153, 300
1879	24, 235, 900	23, 830, 300	14, 056, 000	3, 404, 500
1880	21, 604, 700	25, 168, 000	14, 367, 000	3, 999, 100

TABLE 7.—*Imports of coffee into Sweden for domestic use*—Continued.

RECAPITULATION.

Years.	Total for consumption.	Valued at—
	Pounds.	
1866-'70	79, 659, 200	....
1871-75	102, 363, 400	$20, 759, 500
1876-'80	120, 057, 200	21, 807, 300

AVERAGE OF EACH YEAR.

Years.	Total for consumption.	Valued at—
1866-'70	15, 931, 840	....
1871-75	20, 472, 680	$4, 151, 900
1876-'80	24, 011, 400	5, 361, 400

The proportion calculated per head has been therefore as follows:

1866-'70, average of each year, 4.14 pounds per capita	
1871-'75, average of each year, 4.99 pounds per capita	109. 3 cents
1876-'80, average of each year, 5.33 pounds per capita	119. 0 cents

RUSSIA.

No calculations can be made in regard to consumption, there being probably few coffee-drinkers outside the greater cities, as Moscow, Riga, and others, in addition to St. Petersburg. The pood is taken at 36 pounds avoirdupois. The rouble value varies, but as the customs dues are paid in gold there is no criterion for a proper comparison with other countries.

TABLE No. 8.—*Imports of coffee into Russia for domestic use.*

Years.	Quantities.		Values.	
	Poods.	Pounds.	Roubles.	Dollars.
1866	343,815	12, 377, 340	3, 781, 977	598, 813
1867	407, 193	14, 658, 948	4, 479, 128	708, 778
1868	317, 928	11, 445, 308	3, 497, 195	554, 223
1869	466, 664	16, 799, 904	5, 133, 297	812, 770
1870	440, 461	15, 856, 596	4, 845, 082	767, 137
1871	492, 132	17, 716, 752	5, 413, 458	857, 630
1872	447, 680	16, 116, 480	4, 970, 866	787, 054
1873	409, 470	14, 740, 920	5, 034, 264	796, 798
1874	443, 065	16, 670, 340	5, 415, 598	857, 465
1875	457, 396	16, 467, 256	5, 638, 110	892, 703
1876	500, 589	18, 021, 200	5, 617, 074	889, 370
1877	287, 038	10, 333, 368	3, 211, 317	508, 858
1878	447, 227	16, 049, 956	5, 704, 782	903, 265
1879	472, 448	17, 008, 128	6, 840, 401	1, 083, 610
1880	510, 064	18, 362, 304	7, 129, 000	1, 125, 750

RECAPITULATION.

	Pounds.
1866-'70	71, 138, 096
1871-'75	81, 711, 048
1876-'80	79, 974, 956

AVERAGE OF EACH YEAR.

	Pounds.
1866-'70	14, 227, 619
1871-'75	16, 322, 349
1876-'80	15, 953, 390

AUSTRIA-HUNGARY.

The Austrian capital, Vienna, enjoys a great reputation in supplying most excellent coffee. The country is provided mostly with Java coffee from Amsterdam. Latterly Trieste has paid more attention to imports from Brazil, but the development of railroads favors the competition of German ports, notably Hamburg. Again there is an increased consumption of chicory, largely imported from Germany, but this drug is likely to be placed on the shelf, since strenuous efforts are made to cultivate a trade with South American states, whither large exports of Hungarian flour are shipped, despite that a nearer supply could be had from the United States.

Population, 38,500,000 in 1880, against 31,000,000 in 1865.

TABLE NO. 9.—*Imports of coffee into Austria-Hungary for home use.*

Years.	Quantities.		Values.	
	Metric centners.	Pounds.	Gulden.	Dollars.
1867	211,705	46,595,200	16,130,000	8,065,000
1868	234,199	51,523,200	14,681,000	7,865,500
1869	239,164	52,606,100	17,707,000	8,858,500
1870	264,515	58,193,300	17,859,000	8,929,500
1871	307,355	67,612,900	19,575,000	9,787,500
1872	321,531	70,737,400	23,468,000	11,734,000
1873	343,199	75,503,600	24,889,000	12,444,500
1874	327,859	71,689,800	23,250,000	11,625,000
1875	317,201	69,784,000	34,904,000	17,450,000
1876	327,022	71,944,900	35,976,000	17,988,000
1877	338,526	74,475,700	37,240,000	18,620,000
1878	399,040	87,788,800	37,911,000	18,955,000
1879	193,087	42,499,200	17,378,000	8,689,000
1880	215,996	69,519,100	27,801,000	13,900,500
1881	357,100	78,567,000	30,997,000	15,498,000

RECAPITULATION.

1867-'71	1,256,908	276,516,900	86,412,000	43,206,000
1872-'76	1,636,800	359,659,700	142,484,000	71,242,000
1877-'81	1,604,700	352,880,800	151,327,000	75,663,500

AVERAGE TOTAL DURING EACH YEAR.

1867-'71		55,303,380		8,641,200
1872-'76		71,931,940		14,248,400
1877-'81		70,578,160		15,132,700

PROPORTION PER CENT. PER HEAD OF POPULATION.

				Cents.
1867-'71		1,728		27.0
1872-'76		2,000		29.6
1877-'81		1,900		29.3

ITALY.

The consumption of coffee is limited to a fraction over one pound per head of population. The shipments, however, show a fair increase, commensurate with influx of population and the changes brought since specie payment was resumed. The population has increased from 22,000,000 in 1865 to 28,400,000 in 1881.

TABLE No. 10.—*Imports of coffee into Italy for domestic use.*

Years.	Quantities.		Values.	
	Kilograms.	Pounds.	Lire.	Dollars.
1863	10, 842, 000	....	....	....
1864	14, 642, 000	....	....	....
1865	7, 577, 000	....	....	....
1866	12, 559, 000	....	....	....
1867	11, 590, 091	25, 498, 200	20, 398, 200	4, 079, 620
1868	12, 320, 815	27, 105, 800	21, 684, 900	4, 336, 980
1869	13, 679, 731	30, 195, 400	22, 316, 400	4, 463, 280
1870	12, 615 023	27, 753, 000	22, 262, 800	4, 452, 560
1871	13, 112, 400	28, 847, 500	23, 077, 200	4, 613, 120
1872	12, 372, 200	27, 218, 000	24, 125, 900	4, 825, 180
1873	12, 959, 800	28, 511, 000	32, 399, 000	6, 479, 800
1874	10, 695, 000	23, 529, 000	27, 806, 000	5, 561, 200
1875	13, 580, 000	29, 876, 000	33, 949, 000	6, 789, 800
1876	14, 873, 000	32, 720, 000	32, 721, 000	6, 546, 200
1877	12, 620, 000	27, 764, 000	29, 329, 000	5, 865, 800
1878	12, 697, 000	27, 933, 000	27, 398, 000	5, 479, 400
1879	15, 495, 000	34, 089, 400	33, 314, 000	6, 662, 800
1880	10, 673, 000	23, 480, 000	32, 947, 000	6, 589, 400
1881	14, 135, 000	31, 103, 000	26, 863, 000	5, 372, 600

RECAPITULATION.

1867-'71	63, 318, 400	139, 299, 900	109, 740, 100	21, 948, 140
1872-'76	64, 480, 000	141, 855, 500	151, 851, 900	30, 200, 018
1877-'81	65, 623, 000	149, 370, 700	149, 591, 000	29, 970, 200

AVERAGE TOTAL DURING EACH YEAR.

1867-'71	12, 663, 600	27, 859, 900	21, 948, 000	4, 389, 628
1872-'76	12, 896, 000	28, 371, 200	30, 370, 380	6, 040, 000
1877-'81	13, 124, 600	29, 874, 200	29, 918, 200	5, 999, 404

PROPORTION PER CENT. PER HEAD OF POPULATION.

				Cents.
1867-'71	....	1. 11	....	17. 5
1872-'76	....	1. 07	....	21. 0
1877-'81	....	1. 06	....	21. 2

SWITZERLAND.

The customs returns give the imports in quantities only, without reference to a declared value. The metric centner is equal to 220 pounds avoirdupois. Supply and consumption fluctuate according to the change in season and consequent influx of visits of strangers.

TABLE NO. 11.—*Imports of coffee into Switzerland for domestic use.*

[No returns of values published.]

Years.	Metric centners.	Pounds.
1865	75, 132	....
1866	73, 944	....
1867	81, 063	17, 833, 750
1868	87, 528	19, 256, 160
1869	80, 361	17, 680, 520
1870	67, 648	14, 882, 560
1871	93, 827	20, 641, 940
1872	76, 651	16, 860, 320
1873	83, 838	18, 444, 360
1874	65, 892	14, 497, 780
1875	93, 902	20, 659, 320
1876	99, 655	21, 924, 200
1877	77, 871	17, 131, 600
1878	83, 329	18, 332, 200
1879	96, 325	21, 191, 700
1880	84, 305	18, 547, 100
1881	97, 834	21, 523, 500

RECAPITULATION.

1867-'71	90, 294, 940
1872-'76	92, 383, 480
1877-'81	96, 726, 100

AVERAGE OF EACH YEAR.

1867-'71	18, 058, 988
1872-'76	18, 477, 096
1877-'81	19, 345, 220

PROPORTION PER CENT. OF PER CAPITA.

1867-'71	7. 20
1872-'76	7. 10
1877-'81	6. 98

PORTUGAL.

The port of Lisbon has, during late years, made some progress and established a coffee market. The imports from Portuguese settlements in Africa are now on a somewhat larger scale, and enabled a re-export, as shown in the table marked B. These exports comprise about 50 per cent. of the total of Portuguese imports from Africa, while the remaining 50 per cent. are retained for home consumption. In addition thereto a small quantity is imported from Brazil, and European ports, the total of which is enumerated in the table marked B. The quantities show the weight on which duty has been paid, and consequently leave to infer that the consumption per capita is now a fraction over 1 pound, the population of Portugal numbering 4,300,000.

TABLE NO. 12.—*Imports of coffee into Portugal for domestic use.*

Years.	Kilograms.	Milreis.	Pounds.	Dollars.
1871	892, 691	495, 692	1, 962, 876	550, 217
1872	1, 576, 227	380, 828	3, 465, 704	422, 567
1873	1, 582, 414	491, 290	3, 181, 310	545, 831
1874	1, 547, 741	520, 064	3, 405, 030	577, 270
1875	1, 691, 107	518, 184	3, 720, 424	575, 186
1876	1, 776, 906	531, 268	3, 909, 312	595, 706
1877	1, 702, 271	511, 443	3, 744, 996	567, 761
1878	2, 074. 896	278, 863	4, 564, 771	309, 537
1879	2, 097, 699	535, 719	4, 614, 940	594, 647
1880	1, 919, 295	473, 879	4, 222, 450	526, 004
1881	2, 096, 487	489, 004	4, 601, 127	542, 792

TABLE NO. 12.—*Imports of coffee into Portugal for domestic use, &c.*—Continued.

RECAPITULATION.

Years.	Kilograms.	Milreis.	Pounds.	Dollars.
1872-'76			17, 981, 776	2, 716, 560
1877-'81			21, 718, 284	2, 540, 681

AVERAGE OF EACH YEAR.

1872-'76			2, 596, 355	543, 312
1877-'81			4, 349, 657	508, 136

PROPORTION PER HEAD OF POPULATION.

1872-'76	0. 90 pounds per capita.
1877-'81	1. 10 pounds per capita.

Re-export of produce of Portuguese possessions in Africa.

Years.	Kilograms.	Milreis.	Pounds.	Dollars.
1861	52, 808	12, 628, 000	115, 739	14, 017
1865	739, 419	141, 891, 900	1, 626, 721	157, 498
1866	634, 513	144, 109, 800	1, 395, 938	160, 810
1867	759, 443	166, 954, 000	1, 666, 379	185, 318
1868	1, 006, 938	193, 370, 000	2, 215, 263	214, 840
1869	1, 533, 612	273, 323, 000	2, 372, 046	263, 296
1870	443, 185	30, 843, 000	975, 007	34, 235
1871	1, 627, 749	318, 900, 000	3, 581, 000	358, 760
1872	1, 971, 253	492, 485, 000	4, 347, 600	554, 060
1873	1, 938, 210	561, 769, 000	4, 264, 100	631, 915
1874	2, 730, 945	801, 719, 000	6, 000, 848	901, 590
1875	2, 597, 110	582, 162, 000	5, 713, 620	654, 860
1876	1, 661, 785	894, 807, 000	3, 655, 960	555, 750
1877	2, 089, 292	626, 813, 000	4, 596, 460	705, 150
1878	1, 067, 500	324, 731, 000	2, 348, 500	365, 290
1879	1, 230, 080	369, 978, 000	2, 706, 200	415, 125
1880	1, 905, 559	506, 046, 000	4, 192, 300	569, 250
1881	1, 062, 099	259, 223, 000	2, 363, 600	300, 200

RECAPITULATION.

1867-'71	5, 370, 929		10, 809, 700	1, 056, 450
1872-'76	10, 899, 303		23, 982, 100	3, 298, 175
1877-'81	7, 354, 440		16, 206, 060	2, 355, 015

AVERAGE EACH YEAR.

1867-'71			2, 161, 940	213, 290
1872-'76			4, 786, 420	659, 635
1877-'81			3, 241, 212	471, 003

E. A. MERRITT,
Consul-General.

U. S. CONSULATE-GENERAL,
London, March 26, 1883.

BELGIAN COMMERCIAL MUSEUM.

REPORT BY CONSUL JOHN WILSON.

On the 11th of July, 1882, I reported to the Department that the Belgian Government had just opened in this city a "Commercial Museum," under the control of the minister of foreign affairs.

In that dispatch I gave a detailed account of the object of the institution, the official character of its organization, a description of the building appropriated to the purpose, and the results anticipated from it.

Since that date the bureau of information has been daily open to the public and all the different functionaries of the museum have been constantly occupied in arranging and classifying the exhibit specimens, but not until Saturday, the 21st inst., was this portion of the building officially inaugurated.

The King honored the occasion with his presence, and in a brief speech congratulated the minister of foreign affairs upon the thorough and tasteful manner in which the museum was arranged, and expressed the confident hope that it would constitute an important factor in bringing about a new era of commercial prosperity in Belgium.

Almost the entire corps of foreign diplomatic and consular representatives were present on this occasion, and were, I think, generally pleased with what they saw.

As in my dispatch, already referred to, I reported all the important features of this museum, I shall here only remark that its inauguration under the auspices of the Government, in so thorough and costly a manner, is only another evidence of the desperate and persistent effort this little enterprising kingdom is determined to make in order to hold foreign markets for her manufactures against the growing importance of her larger rivals, of which the United States is one of the most redoubtable.

JNO. WILSON,
Consul.

UNITED STATES CONSULATE,
Brussels, April 23, 1883.

ST. PETERSBURG-CRONSTADT CANAL.

REPORT BY CONSUL-GENERAL STANTON.

St. Petersburg, as a port of entry, has always had to contend with two great obstacles to trade, viz, a long, severe winter, which closes the port about five months in the year, and a bar at the mouth of the Neva, which prevented vessels of deep draught from approaching the city nearer than Cronstadt.

Cronstadt, a fortified island of limited dimensions, has always been the actual port of St. Petersburg for vessels drawing more than 9 feet. Here the cargoes were transferred to lighters and towed some 20 miles to the city.

To obviate the consequent delay and expense and make St. Petersburg a port for sea-going vessels, numerous plans have been considered from the time of Peter the Great to that of the late Emperor, and the object of the present paper is to explain what has been and is being done to overcome St. Petersburg's natural disadvantages.

Peter the Great undertook the construction of a canal 15 fathoms wide along the shore of the Gulf of Finland from the Fontanka River to Oranienbaum, and traces of this work are still to be found between Strellna and Sergee.

From Peter's time to 1872 many plans were considered, but no actual work was done. In this year it was determined—

1st. To organize and maintain as a Government route, at Government expense, a canal which should be kept navigable for vessels drawing 18½ feet of water.

2d. To construct this canal from the Ekaterinoff channel of the Neva through the Cannoneer, Volney, and Goutoneff islands.

3d. To permit, in connection with the canal, the construction of harbor and docks by private enterprise, but under such restrictions as would preclude all monopoly.

4th. To maintain towards the center of the canal a strip of land extending 10 fathoms from the outer wall of the dikes, as an inseparable appurtenance thereto.

It was estimated that the construction of such a canal would take six years to complete, and cost 7,500,000 roubles.

In 1874 the plan was finally approved, and a committee was appointed to superintend the construction of the canal. In consequence of injuries sustained by the dredging-machinery *en route* from England, work was not actually begun until 1877, or three years later than was anticipated. The termination of the work was consequently set for 1883, so that the canal may be opened to traffic with the opening of navigation in 1884.

A closer study of the original plans showed the advantage of certain alterations, which were finally adopted, viz:

1st. To construct the canal with two branches, one leading northward to the Neva and the custom-house on the Goutoneff island, the other southward to the village of Emilianofka.

2d. To build a port of entry at the junction of the north branch and the Neva, and to erect store-houses for imported merchandise.

3d. To permit the erection on the south branch of private warehouses for merchandise intended for exportation, but under such restrictions as will prevent monopoly.

4th. The harbor to be built on the left bank of the southern instead of the northern branch of the canal.

These alterations having been adopted in 1879, the work was carried out accordingly. The length of the canal in this new direction is 25 versts 210 fathoms; the length of the south branch being 3 versts 220 fathoms. That portion of the canal nearest Cronstadt, or 16 versts 25 fathoms, will not be inclosed, but take the form of a channel 50 fathoms wide, dug in the bed of the gulf. The remainder of the canal will be protected by strong dikes. The inclosed portion will be 40 fathoms, except at the islands, where its width will be 30 fathoms. The depth throughout will be 20 feet. All the work on the canal will be finished this year, and the cost thereof is estimated at 3,500,000 roubles.

Conformably to article 2d a harbor having a superficial area of 4,500 square fathoms will be constructed on Cannoneers and Goutoneff Islands. This harbor is situate at the junction of the Neva and the northern branch of the canal, from which it is separated by dikes broad enough to permit the erection of warehouses and the laying down of railway tracks.

The basin is to be faced with stone quays 750 fathoms in length, and capable of receiving 2,500,000 poods of merchandise for customs inspection. A branch of the Putiloff Railway will be laid to the warehouses, thus enabling the shipment of merchandise direct from the docks to the interior of Russia. The cost of the docks, together with the cranes and railway, is estimated at 2,500,000 roubles.

As soon as this canal is completed, it is proposed to connect the Neva from a point above St. Petersburg, near Schlusselburg, by means of a canal which shall terminate at the village of Emilianofka with the new harbor. This will enable boats and barges from the interior of Russia to discharge their cargoes directly at the port of export.

The termination of this secondary canal completes also the scheme for rendering St. Petersburg a seaport, and restores to Cronstadt its original character of a fortress.

The plan of construction of the sea canal involved the dredging of the first three versts from the mouth of the Neva through the Cannoneers Island, and the adjacent shoals. It was decided to effect this by the employment of dams and pumps, whilst dredges were more to be used in the open portion of the canal and the deeper parts of the southern branch.

The shallowness of the southern channel offered considerable difficulties. On the bar there was but 4 feet of water, and the mud barges had first to be towed over it by a steam-barge in order to enable the tow-boats to take them to the dumping-ground.

Although work was begun on both sides of the bar, the limited front prevented the excavation of more than 2,300 cubic fathoms during the season of 1877. In 1878, 53,000 fathoms were excavated, and in 1879, including the work done by the pumps on Cannoneers Island, the amount removed was 79,000 cubic fathoms; in 1880, 161,000, and in 1881, 120,000 cubic fathoms. The whole amount excavated from 1877 to 1882 is 486,000 cubic fathoms, or two-thirds of the work to be done. The remaining one-third will be finished in 1882 and 1883.

In 1878 the erection of the dikes was begun. Those in the harbor were made by driving a row of piles, which were cut off at the water's edge, backed up with earth, and paved with cobble-stones. The canal dikes were differently constructed. Double rows of piles were driven in the deeper portions, and in the shoals fascines, and in some places cribs filled with stones, were used. The piling, cribs, and fascines served only to secure the dikes below water. The space between the double rows of piling was filled with earth, and when reaching the water's edge covered with fascines and paved.

Great difficulty was experienced when the dikes had reached a height of 2 or 3 feet above the water level, as the heavy seas, created by the prevailing west winds, washed the dams away. After a heavy gale had severely damaged the dikes, a temporary breakwater was built in front of the dikes by sinking cribs filled with stones.

The following plan for removing the soil excavated along the dikes was adopted with signal success:

A large barge, furnished with a large vertical iron cylinder, received the mud through troughs, from the dredges. A strong centrifugal pump discharged water into this cylinder where it was mixed with the mud and formed a liquid mass which was forced to the dikes through floating pipes, 16 inches in diameter. Here it was used for filling up the dikes, the earthy part settling and the water being carried off to the gulf.

For removing the soil excavated in the unprotected portions of the canal, wooden and iron barges, with movable bottoms, were used, but, proving unmanageable in heavy weather, steam barges were substituted.

Most of the dredges are bucket dredges, but three, the property of the Morris and Cummins' Dredging Company of New York, are grapple-dredges, and under the management of Americans have done effective service during the last five years.

The work on the harbor at Goutoneff Island was chiefly done by navvies, though they were greatly assisted by a digging-machine.

The quays of the haven are built on cribs filled with stone. They will be faced with cobble-stones, beginning 5 feet below and extending 12 feet above the water-level. Work on the port was begun in the winter of 1881. The dams were completed by spring of 1882, when the water was pumped out and the work of deepening begun.

The following machines are employed, viz:

	Cubic fathoms.
6 dredges, excavating daily from	200 to 300
3 dredges, excavating daily from	50 to 80
5 iron steam barges, folding bottoms, carrying	20
14 iron barges, folding bottoms, carrying	6 to 7
10 wooden barges, folding bottoms, carrying	12
57 wooden barges, tight folding bottoms, carrying	4½ to 5
12 steam tow-boats.	
1 steam yacht and 2 steam tenders.	
2 floating excavators for discharging soil into dikes.	
1 steam excavator for land work.	
7 engines with centrifugal pumps.	

Besides the foregoing the following are engaged until the canal is completed, viz: 1 dredge, excavating daily 100 cubic fathoms; 2 locomotives and 60 trucks; 3 American dredges, with 6 wooden barges; 2 tow-boats, and 1 steam yacht.

The estimated amount of work to be done was:

1. Deepening channel	cubic fathoms..	658,700
2. Filling dikes	do....	272.284
3. Piling dikes, below water-level	fathoms..	12,380
4. Paving dikes	sq. fathoms..	75,730

To the 1st of January, 1882, the following amounts had been done, viz: (1.) 66½ per cent.; (2.) 72½ per cent.; (3.) 98.72 per cent.; (4.) 21.66 per cent.

The northern dike from Cannoneers Island to the entrance of the port, a distance of 2 versts 250 fathoms, and the enlarged portion of the southern dike at entrance to the port, a distance of 300 fathoms, are entirely completed.

The latter dike is united to the general railway system by the Putiloff Railway. A harbor is established near the Putiloff Railway at the mouth of the southern canal.

Eighteen per centum of the work on the import harbor at Goutoneff Island has been done.

EDGAR STANTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, April 12, 1883.

THE POTASH INDUSTRY OF STASSFURT.

BY CONSUL FOX, OF BRUNSWICK.

One of the most important industries in this consular district is the production of potash fertilizers at the salt mines of Stassfurt. Ernst Herzberg, of Berlin, in a pamphlet, entitled "*Deutschlands Schatz in seinen Kalisalzen*," gives a very lucid account of this industry. But a short time since the winning of these mineral products was attained with difficulty. Ten years ago about 40,000,000 kilograms of Indian saltpeter, mostly used for manufacturing purposes, were imported annually into Great Britain. In Europe the salts were further extracted from feldspath, sea-water, and from the sweat of sheep's wool. This latter process was formerly a regular industry in Moabit, near Berlin.

The North German plain from the left bank of the Weser, over Sperenberg to Inowrazlàw, and from Halle, over Hüneburg to Segeberg, is thought in all probability to have been at one time a sea; the immense salt layers at Stassfurt, Westeregeln, and Egeln are thus accounted for.

In 1838 the Prussian ministry of commerce called for an opinion from the "*oberbergämter*" (department of mines) as to what points stone salt would be most likely to be obtained. Various opinions were given, and it was finally decided to make borings at Stassfurt. The shafts successfully sunk at Stassfurt in 1857 first came upon a kind of salt previously unknown. It was considered worthless and was cast aside, receiving the technical name of "Abraumsalze." No one then imagined that it was this very product which was to give the mines a world-wide reputation. The first to attempt the production of potash from this raw salt was Schloto Douglas, of Aschersleben. Mr. Douglas first secured privileges to mine extensively at Westeregeln and then established there the potash and salt works Douglastall. This establishment is now the property of the Consolidated Alkali Works of Westeregeln. Since Mr. Douglas, many other borings have been made, but what was sought, viz, potash and magnesia salt, was not found in paying quantities; lately however, a new mine has been opened in Aschersleben which promises good results.

After explaining scientifically the value of the potash fertilizers, Mr. Herzberg says:

> Let us examine the situation in Germany; December 1st, 1880, the population of the German Empire was 45,234,061 against 42,727,372 in 1875, an increase of 2,506,689 in five years, or at the rate of half a million a year. At this rate in twenty years we will have 55,000,000 instead of 45,000,000 to maintain. To accomplish this there are simply three possibilities: Either the export of cereals must be curtailed, or the import increased, or German soil must be made more productive.

Raitzinger, in his work on political economy, speaking in connection with the great increase in population during the past ten years, says:

> No one thoroughly acquainted with the condition of German agriculture can gainsay the fact that our soil could have produced one-fifth, yes, even one-third more, had our agriculturists had better fertilizers at their disposition. Germany has the means to obtain these fertilizers, a natural product which she can supply not only to herself, but to the whole world for centuries.

Inclosed I beg to transmit a report made at my request by the firm of R. Weichsel & Co., of Magdeburg, showing the present situation of this industry. The export to the United States. as far as can be seen from records of this consulate was in 1881 $539,922.38, in 1882 $540,120.50.

This shows that American agriculturists fully recognize the value of the Stassfurt manure salts.

For further information upon this subject I would refer to the work of Mr. Herzberg, and to those of von Bischoff in Weissenfels, Ochsenius in Marburg, and Märker in Halle.

WILLIAM C. FOX,
Consul.

UNITED STATES CONSULATE,
Brunswick, February 2, 1883.

THE POTASH INDUSTRY.

[Reports by Messrs. R. Weichsel & Co., of Magdeburg, inclosed in Consul Fox's report.]

The business year just closed has been one of unusual prosperity, and the best ever known in the annals of the Stassfurt kali industries. The retrospect must indeed cause every manufacturer peculiar pleasure, as but only a few years since the outlook was anything but encouraging, and the very existence of many of the establishments was questioned. It is very doubtful if this era of prosperity would have dawned at all had not the mines almost at the last moment fully recognized the fact that the only way to retain reliable and solvent purchasers for the raw salt was to limit the production to the actual demand; they therefore made a compact among themselves to mine only such quantities of raw salt as would correspond to the demand for muriate of potash. The following comparative statement of the carnallite production during the year 1881–'82 shows clearly upon what good grounds their hopes were based and what an important factor in the development of the industries this compact proved to be. There was mined the following quantity:

[In centners carnallite.]

Mines.	1881.	1882.
Leopoldshaller works	7, 205, 000	10, 110, 000
Prussian works	3, 730, 000	5. 497, 000
Alkali works	2, 040, 000	2. 943, 000
Neustassfurter works	1, 921, 000	2. 631, 000
Total	14, 896, 000	21. 181, 000

The above yielded respectively ca. 2,291,700 and 3,258,600 centners muriate of potash of a consistency of 80 per cent. The muriate of potash production of this year exceeds, therefore, that of 1881 by about one-half. Examining the prices, we have the interesting result that notwithstanding the enormous increase in the production, the prices increased correspondingly. In July, 1880, muriate of potash of 80 per cent. minimum strength could be bought for 5.50 to 5.70 marks per 50 kilograms, inclusive of sack. The same quality delivered throughout the whole year 1881 was held at 5.60 marks. Up to December, 1880, the prices for delivery January–December, 1881, increased successively to 6.10 marks, which price advanced further so that in January, 1881, 6.45 marks was paid, and in December the same year prompt delivery was scarcely to be had at 7.90 to 8.00 marks. The delivery business of 1882 began in 1881 with almost the same prices as paid in 1880 for 1881, that is, 6.15 marks, advancing steadily to 7.60 marks. In the mean while the production in January, 1882, was held at 8.00 marks, fell to 7.00 marks in June, rose to 7.50 marks in September. On account of heavy offers of outside parties the prices fell in November to 7.25 marks, and closed at 7.00 marks per 50 kilograms for 80 per cent., inclusive of sacks, without any especial requests. This great increase in price is in the second instance to be considered the result of the working together of the more important manufacturers, who had united for the purpose of selling at firm minimum prices; they were desirous of taking advantage of the high prices and were anxious to prevent unnecessary underselling, which would materially affect the firmness of the market. This sort of an arrangement is easy to carry out, provided the demand is equal to or even exceeds the production; in any other case it is of little use and does not hinder the backward tendency in prices. This fact is now very evident at the close of the year, the water-way to the sea being interrupted by frost, the large quantities on hand, consumption being light, bear down the prices. There are at present negotiations pending with the mines, the intention being to reduce the carnallite production and thereby that of muriate of potash, in order to restore the market to its former firm basis. This proves again that the mines alone have it in their hands to have a prosperous potash industry.

With more than ordinary interest are all eyes concentrated upon the Aschersiebener mines, all are anxious to know what the result of this new competition will be. Notwithstanding that we strongly oppose all guardianship of trade and industry, nevertheless in the case cited, we trust that it may be possible, through the unity of the mines, to succeed in finding ways and means to overcome the difficulties which the opening of the fifth mine will cause. It is especially of great interest to the Leopoldshaller; from this mine the Government of Anhalt obtains its largest revenue. In consideration of this fact, and further that this mine at the time the compact was made was the largest producer, the lion's share was therefore conceded to it, viz, one-half, Prussia, one-fourth, and Westeregeln and Agathe each one-eighth. Through the opening of the Aschersiebener we have now to count with five mines, and if each of the mines demands a fifth part in the apportionment, Anhalt would lose too much. The whole momentary daily production at the end of December, 1882, is 75,000 centners for Anhalt, therefore 37,500 centners and a reduction from this quantity to a fifth, *i. e.*, to 15,000 centers, would mean a daily loss of about 11,250 marks, calculating the centner carnallite 50 pfennigs. As before stated here is a great obstacle to surmount, which we trust the present negotiations may succeed in accomplishing. There was mined as follows:

RAW KAÏNIT.

Mines.	1881.	1882.
	Centners.	*Centners.*
Leopoldshaller Works	3, 800	....
Prussian Works	1, 508, 000	1, 261, 000
Agathe Works	1, 594, 000	1, 543, 000
Total	3, 105, 800	2, 804, 000

The home consumption in 1881 was 635,000 centners; in 1882 940,000, an increase of 305,000 centners. Exported in 1881, carnallite 2,470,000 centners; in 1882 1,864,000, a decrease of 606,000 centners. America is the largest purchaser, and this decrease of 606,000 centners is almost wholly the decrease in the export to the United States. An interesting fact is, that the German agriculturists having become more and more convinced of the immense value of the potash fertilizers, are now demanding that the exportation be prohibited, or that an export duty of 3 marks per 50 kilograms, which would have the same effect as actual prohibition, be levied. They desire to secure to themselves alone this great treasure for all time to come. It is hardly probable that such measures will be adopted.

CALCINED MANURE SALT.

In this article the export during the year past was unimportant and only in the latter part of the year was there any especial call for it. Manure salt guaranteed with a minimum consistency of 27 per cent. and 12 per cent. potash was the most in demand.

MURIATE OF MAGNESIA.

The production in this year amounted to about 225,000 centners, mostly sold to England at firm prices.

SULPHATE OF MAGNESIA.

About 650,000 centners was produced. This article, a secondary production of muriate of potash, fell considerably in price, a natural consequence of over-production, and it is now at such a point as to hardly pay for the necessary water to wash it out.

MILL WAGES IN BELGIUM.

REPORT BY CONSUL TANNER, OF LIEGE AND VERVIERS.

As the cost of labor may have some bearing upon future legislation in the United States I have the honor to transmit herewith a statement upon that subject prepared by Mr. Edward Krischer, of Verviers.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE,
Liege and Verviers, March 23, 1883.

WAGES PAID IN THE WOOLEN INDUSTRY IN THE DISTRICT OF VERVIERS.

Being subject to great variations, wages in this branch can only be reckoned approximately, for, of course, as business grows better workmen become more rare, and the scale of wages naturally tends to rise. Then, too, some mill owners whose establishments are situated at some distance from the center of trade are obliged to raise the salary as an inducement to get hold of the necessary hands.

Some mills in the neighborhood of Verviers have nevertheless derived a benefit from that fact, I mean that being at a pretty good distance from town, they have created something like small colonies who are willing to work for less money because living is not so expensive as in town.

The wages generally differ from one mill to another in very large proportion. This depends upon many circumstances, such as the production of the machinery, the difficulties presented by the articles made, &c.

The day is generally reckoned at twelve hours, viz, from five to eight o'clock in the morning, from half past eight to twelve noon, from one to four, from half past four to seven afternoon. There are a few exceptions; some mills begin only at six and stop only fifteen minutes at eight, one hour at noon, and fifteen minutes at four o'clock.

Usually workmen go home only at noon for dinner and at seven for supper, but when orders are to be promptly executed they work after supper from quarter past seven or half past seven till nine or ten, which time is better paid than the day-time.

When it is necessary to work the whole night through, there is another set of hands who begin at seven, to stop at midnight, and recommence at half past twelve until five in the morning.

Though working ten and one-half hours only, wages are paid them as a whole day of twelve hours. For night work the hands who during a previous week have been working day-time are called upon to do the night work during the week following and *vice versa*; this as a necessary precaution to insure good health.

As an average I should conclude that men receive 3.50 francs a day (70 cents); women receive 2.50 francs a day (50 cents); children (at least twelve years old) 1.50 francs a day (30 cents).

Average wages per day of operatives.

	Francs.	
Preparation of wool:		
Warehouseman	3.00	$0 60
Sorter (male or female)	2.50	50
(piece work, about 1 franc per 100 kilograms.)		
Scourer (male)	3.00	60
Dryer (male or female)	2.75	55
Burrer (male). Wool carboniser (male)	2.75	55
Dyer (male)	2.50	50
Fire-beater (male)	4.00	80
Engine-tender	4.50	90
Spinning mill:		
Oiler (male)	3.25	65
Card feeder (male or female) piece work, according to production, about 0.40 francs per 100 hanks, the hank being 1,535 meters in length	4.00	80
Spinners (male), (piece work 1 franc per 100 hanks)	4.00	80
Piecer (boy or girl at least 12 years old), generally the half of the spinners' wages	1.50	30
Reeler (female), (piece work 0.50 francs per 100 hanks)	2.75	55
Cleaner (male)	4.00	80
Combing mill:		
Card-feeder (male or female), comber (male or female), drawing-frame hand (female)	2.75	55
Spinner (male)	5.00	1 00
Piecer (male 18 to 20 years old)	3.00	60
Piecer (male 15 years old)	1.50	30
Cloth manufactory:		
Warper (male or female), (paid also by piece)	3.00	60
Hand-loom weaver (male), (by piece 0.35 to 0.50 francs per 1,000 picks)	3.75	75
Power-loom weaver (male or female), (piece work 0.47 to 0.75 francs per 1,000 picks)	3.75	75
Fuller (male), finisher (male), presser (male), sponger	3.00	75
Picker (female), marker (female)	2.00	40
Darner (female)	2.75	55
Packer (female), putting pieces in linen covers	2.25	25

STATISTICS OF A WOOLEN MILL AT NANTES.

REPORT BY CONSUL WILSON.

I have been enabled to procure, in a solitary instance only, the statistics of a woolen mill in this city, which I herewith transmit.

This section of France is agricultural and commercial rather than manufacturing. The habits and customs of the people are not favorable to extension of manufactures. The common people, who would form the working classes in such establishments, are too independent, too careless, too uncertain, and their price of labor too high, to make manufacturing profitable or to induce the investment of capital therein. I am credibly informed that on the exodus from Alsace and Lorraine, after the Franco-German war, a committee of manufacturers visited this city with a view to its selection as a new location, but on examination declined for the reasons above stated, though other things were favorable.

The causes which have served to produce these habits and customs among the people would afford a theme for a moral philosopher and a political economist. I shall not even hint at them here.

Twenty years ago there were nineteen cotton mills in operation in this city; now there are but one or two, or at most three, and they are comparatively insignificant.

The proprietor of the largest, on my application for statistics, positively refused to give any information, alleging it was none of the business of the United States Government, and that he resented its attempt as an inquisitive intrusion.

I felt so humiliated that I made no further endeavor in that direction.

I was fortunate enough, however, to find a gentleman, owner of a woolen mill, who recognized the impossibility of obtaining statistics unless private affairs were in some degree made public.

Under proper safeguards of confidence he gave me the following:

STATISTICS OF A WOOLEN MILL.

Area of land occupied, two acres; present cost value, $20,000; area of floor of buildings, 4,000 square meters; material of buildings, stone; present cost value thereof, $40,000; machinery used: number of carding-engines, 10; number of mules or jacks, 15; number of spindles, 3,000; present cost value of all machinery, including boilers, engines, &c., $50,000; amount of taxes paid annually, $560; cost of coal per ton (2, 240 pounds) delivered at the mill, $5.30; rate of taxation on quick capital, 3 per cent; average rate of interest paid on capital borrowed, 5 to 6 per cent.; return on capital satisfactory to owner, 8 to 10 per cent.; cost of single set of carding-engines, as above described. $600; total number of persons employed, 500; number of hours labor per week, 68.

Average wages paid per week.

Men:	
Overseer	$12.00
Second hands	6.00 to 8.00
Overlookers	5.00 to 6.00
Common hands	3.60 to 4.00
Women:	
Second hands	3.00 to 4.00
Common hands	2.00 to 2.50
Children	1.80 to 2.00
Yard hands:	
Engineer	24.00
Firemen	6.00 to 8.00
Watchmen	5.00 to 6.00
Laborers	4.00 to 8.00

III.

The *annuaire statistique de la France* gives, for 1879, the following as the number of spindles operated in the departments belonging to this consular district:

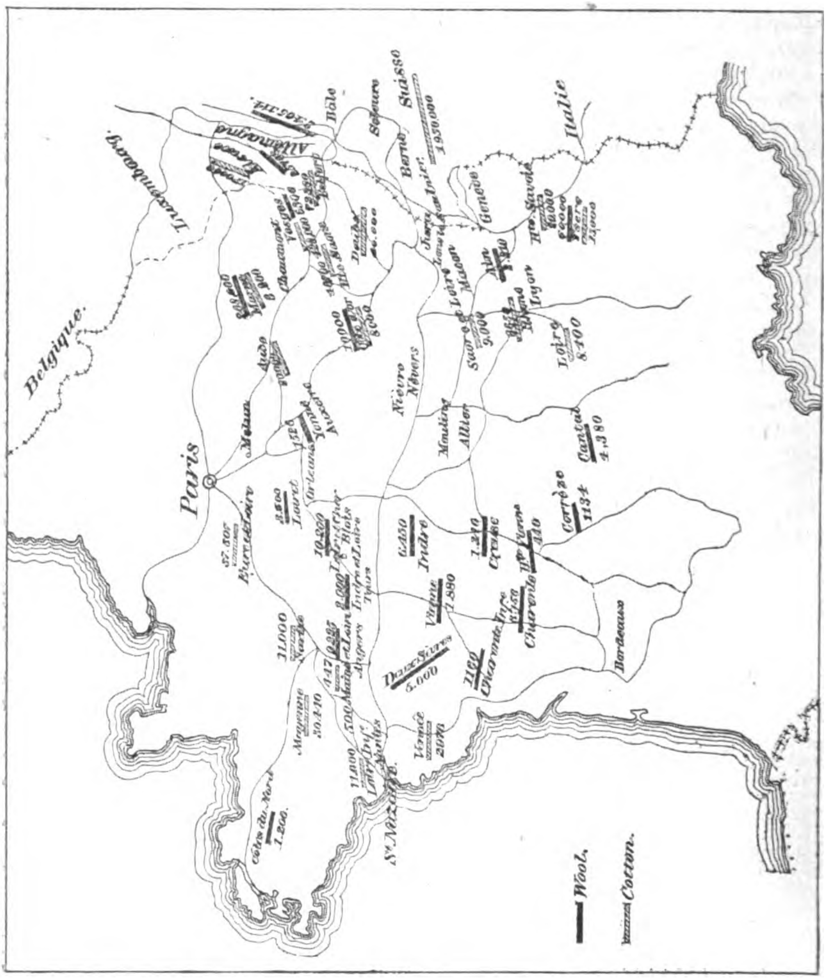
Departments.	Spindles of wool.	Spindles of cotton.
Loire-Inférieure	1, 500	11, 000
Maine-et-Loire	9, 225	20, 647
Mayenne	....	30, 440
Sarthe	480	11, 000
Vendée	7, 880	2, 976
Indre-et-Loire	2, 000	....
Loir-et-Cher	10, 200	....
Total	21, 285	76, 063

I attach also a map prepared by the Chamber of Commerce of Nantes, showing the number of spindles of both wool and cotton in divers departments in France supposed to be dependent on and tributary to Nantes as a port of export and import for all trade with the American continent.

From the figures herein given the chamber concludes the aggregate number thus tributary to Nantes to be 140,634 spindles of wool and 2,671,143 spindles of cotton. This *carte* was prepared as bearing upon the prospective traffic of the proposed Panama ship-canal.

THOMAS WILSON,
Consul.

UNITED STATES CONSULATE,
Nantes, March 3, 1883.



COTTON MANUFACTURES IN ALSACE.

REPORT BY CONSUL BALLOW, OF KEHL.

In a former report I briefly mentioned the cotton industry of Alsace. I shall now endeavor to state the important facts relative to this, by far the most important industry of this province, and one of the greatest in Germany.

There are in operation in Germany at the present time about 5,000,000 spindles. Over one-third of this number, or 1,700,000, are in operation in Alsace. The importance of this industry will perhaps be better understood if I state that the population of Alsace is 1,200,000 and the number of spindles 1,700,000, thus giving an average of 1,420 spindles to every 1,000 inhabitants.

The cotton mills, although scattered over the entire province, are much more numerous in Upper than in Lower Alsace, and the largest and most important establishments are located in the manufacturing cities of Mülhausen, Colmar, Markirch, and Münster.

Since the annexation of Alsace to the German Empire, a number of the most important firms have established factories just across the border in France. One noted venture of this kind is located at Belfort, where large works have been erected. These parties who have extended their business into France have in no way reduced their establishments in Germany, but in some instances have changed the quality of their productions to suit the German market.

The manufacture of cotton was first introduced into Alsace in the year 1746, and improved gradually until the year 1802, when it received a decided impetus from the subsidies granted by Napoleon I. Since then its progress has been marked and rapid, considering geographical disadvantages.

But to show more plainly the progress of this industry in Alsace, I submit a statement showing the condition of affairs in the years 1827 and 1878:

Statement showing the cotton industry of Alsace in the years 1827 and 1878.

FOR THE YEAR 1827.

Description.	Spinning.	Weaving.	Printing.	Total.
Number of establishments	49	....	27	....
Spindles	466, 363	....	....	466, 363
Weaving looms	....	....	22, 027	22, 027
Pieces of textures produced in one year	3, 699, 000	....	....	3, 699, 000
Pieces of textures	....	718, 010	527, 935	1, 245, 945
Laborers employed	10, 240	23, 352	11, 248	44, 840
Total of wages	....	....	....	....
Value of products in dollars	$3, 500, 000	$4, 000, 000	$7, 500, 000	$15, 000, 000
Value of mills and machinery	$6, 100, 000	$1, 500, 000	$2, 500, 000	$10, 000, 000
Business capital	$2, 000, 000	$1, 400, 000	$8, 000, 000	$11, 400, 000
Tons of coal consumed	9, 810	....	....	9, 810

Statement showing the cotton industry of Alsace in the years 1827 *and* 1878—Continued.

FOR THE YEAR 1878.

Description.	Spinning.	Weaving.	Printing.	Total.
Number of establishments	65	105	17	187
Spindles	1,667,656	......	....	....
Weaving looms	....	37,400	....	....
Pounds of textures produced	49,064,000	33,240,000	....	82,304,000
Yards of textures	....	....	55,052,000	....
Laborers employed	12,247	27,486	6,575	46,308
Total of wages	$1,698,577	$3,570,000	$980,550	$6,249,077
Value of products	....	....	....	....
Value of mills and machinery	$14,700,000	$9,000,000	$6,000,000	$29,700,000
Business capital	$15,000,000	$8,000,000	$5,000,000	$28,000,000
Tons of coal consumed	180,000	45,000	60,000	285,000

The small increase in number of operatives employed in the establishments for printing cottons is due to the introduction of new inventions for printing with rollers instead of by hand. It will be noticed that in 1828 the number of people employed in printing was 11,248, and they produced about 21,117,400 yards, while in 1878 but 6,577 were needed and 55,052,000 yards were produced. In the above statement no figures are given as regards the value of the cotton manufactured in 1878. This may be imputed to the fact that there are no means for obtaining accurate information in this regard, but judging from facts and figures which I have received from reliable sources the value of the products for 1881 was about $59,000,000, and for the year 1882 about $60,000,000.

The oldest cotton mill in Alsace is at Mulhausen. This mill was established in the year 1746, and as it is a representative concern, and the largest on the continent, a description of it may be of interest. The three members originally interested in the establishment dissolved partnership in 1758 and started separate mills, one of the company remaining in the old buildings and continuing business there. The firm since 1802 has been known as "Dollfus, Mieg & Co." Their grounds are extensive, covering over eighty acres; number of buildings, 250. They have in operation 76,000 spindles and 700 looms. They were the first to introduce the printing of cottons into Alsace, and have always occupied the first position in this branch of industry. They are now using 20 printing machines, the printing establishment and machinery costing $500,000.

This mill produces one-tenth of the cotton manufactured in Alsace, the value of productions being about $6,000,000 per annum, the printing alone amounting to $2,000,000. Engines of 2,000 horse-power are used, requiring a consumption of 32,000 tons of coal per annum.

All grades of yarn from 10 to 100 are spun, the establishment (land, buildings, machinery, &c.) is valued at $1,250,000. This estimate is made on the basis of 20 francs, or a trifle less than $4 per spindle, allowing the difference for depreciation from use, &c. A new mill, land, buildings, machinery, &c., would cost $15 per spindle. This firm employs 3,200 operatives—men, women, and children. They have recently established a fine mill at Belfort, France, where they give employment to a large number of operatives in the manufacture of cottons, especially for the French market.

The cost of coal per ton delivered at Mulhausen during the year 1882 was as follows: From Ronchamp, France, $4; from Saarbrucken, $3.10 to $3.50 per ton.

RAW COTTON SUPPLY.

The raw staple used is imported from America, India, Egypt, and in small quantities from Brazil and Australia. In the year 1878 the importation consisted of 59,449,252 pounds, divided as follows: From the United States, 35,159,878; India, 15,913,174; Egypt, 7,514,672; other countries, 861,528, and for the year 1881 the amount imported was 61,754,000 pounds, 39,699,000 pounds of this being American cotton.

There are several large establishments in Alsace where ribbons and textures are made in which both silk and cotton are used. The amounts of cotton used by these mills is not large, but the finest goods spun are required.

Of the 1,700,000 spindles now in operation in Alsace it is safe to put the number using American cotton at 1,200,000; the remainder consume Indian and Egyptian cotton, the white qualities of which were not produced twenty years ago. Manufacturers claim that they would prefer to use Louisiana cotton if it had a longer and finer silk; it could be used to advantage in the manufacture of certain numbers which have of late been in large and increasing demand. At present, as there is a lack of good Louisiana, the manufacturers are using white Egyptian for spinning Nos. 40 to 60. Some, however, use American cotton in making textures Nos. 40 to 60, and certain fine numbers are also made from this cotton. Complaint is made that the cotton is dirty and discolored, but in no instance has cotton been received which had the appearance of being purposely sanded. They claim that for the past five years it has been growing worse; but upon asking for samples of cotton in this condition I have received the answer, "At present we have none on hand;" and when I have inquired will not American cotton average well with other cottons the answer has been invariably in the affirmative. Fault is found (and with reason) with the slovenly appearance of the bales of cotton from America. They are loosely wrapped and insecurely bound, and the cotton in consequence badly discolored. I was shown some which in comparison with the way in which Egyptian cotton is baled looked anything but secure and neat. A little attention to this matter would, I am sure, well repay the growers. This is the rule, but there are, of course, exceptions to it. I was shown some Georgia uplands which for neatness and compactness compared favorably with those of other countries, although not as securely bound.

I have examined various samples recently, and I consider the American product fully equal to others as regards cleanliness, and in no instance did I find as many seed hulls as in samples of cotton from other countries. The loss in weight of the finest grades of American cotton during process of manufacture is from 10 to 12 per cent.; Egyptian, from 20 to 25 per cent.

Since the completion of the Saint Gothard tunnel the cost of transporting cotton from Alexandria to Mulhausen direct, or to Colmar, has been reduced from $14.50 to $13 per ton, with a prospect of further reduction. The cost of transporting cotton from Charleston to Mulhausen or Colmar is $26 per ton. From the port of Genoa to Mulhausen, through the Saint Gothard, it is $1 per ton less than via Mont Cenis.

WAGES OF COTTON OPERATIVES.

The operatives at Mulhausen, Colmar, and in the principal mills are paid every fortnight. Mulhausen pays the largest wages. Spinners and piecers are paid according to weight, the same as iron frame tend-

11 JUL 83

ers. Creelers are children from ten to fifteen years of age, who are obliged to attend school three hours daily; they receive wages varying from 18 to 30 cents per day. The wages in the Alsatian cotton mills have doubled since 1832, with an average increase of 60 per cent. during the last thirty years. Operatives in Mulhausen now earn 20 per cent. more than in 1870. The following statement will show the wages paid to the different operatives in Mulhausen; work, eleven hours each day:

Earnings per week of the operatives during the year 1882.

Cotton weaving:	
Bobbin winders	$2 10
Warpers	2 52
Dressers	4 80
Weavers	3 00
Foremen	5 28
Cotton spinning:	
Foremen to carders	$6 00 to 7 20
Tender of beaters	1 80 to 2 40
Cleansers of cards	2 70 to 3 90
Sharpeners of cards	4 10 to 4 80
Tenders of cards	1 80 to 2 10
Tenders of drawing frames	2 10 to 2 40
Tenders of spindle frames	2 88 to 3 90
Bobbin winders of spindle frames	1 50 to 1 68
Foremen to spinning	6 00 to 7 20
Conductors of self-acting looms	3 90 to 5 10
Tiers	3 00 to 3 90
Bobbin winders	1 80
Packer of spindles	4 80 to 6 00
Laboring men	2 30 to 3 00
Tenders of steam-engines	6 00 to 6 50
Firemen	4 80 to 5 10
Watchmen	4 80 to 5 10
Greasers	4 30 to 5 10
Drivers	3 00 to 3 60
Average wages	4 13

COST OF LIVING.

The cost of living does not vary much in Alsace. The following statement will show the cost of the necessaries of life in Mulhausen at present:

Bread	per pound	$0 04
Flour	do	08
Cheese	do	06
Wine	per quart	18
Beef	per pound	18
Bacon	do	20
Potatoes	do	02
Rice	do	10
Eggs	per dozen	24
Butter (fresh)	per pound	24
Milk	per quart	08
Sugar	per pound	10
Beer	per quart	06
Salt	per pound	03
Petroleum	per quart	07
Tea	per pound	1 00
Candles	do	17
Soap	do	10
Coffee	do	30

TECHNICAL EDUCATION.

The superiority of Alsatian printed cottons has always been an acknowledged fact, and manufacturers are justly proud of their success in this branch, but it can only be attributed to their energy and perseverance, together with the habit of encouraging all advances made in this department in a most substantial manner.

A school for preparing colors and for special chemistry for the production of fine blending and fast colors was established in 1821. In this school young men have an opportunity to perfect themselvès in the dyeing, printing, and bleaching processes, and in the manufacture of chemicals. This school was founded by subscription for the purpose of instructing students in the art of figure, pattern-drawing, &c., for prints. The faculty consists of 8 professors, and the average number of students in attendance is 300. Any person who has talents in this direction is received and instructed gratis. And to the taste and ability of these students may, in a great measure, be imputed the excellence of Alsatian prints, which up to this time have maintained their supremacy despite many hinderances. Among other means adopted to improve the cotton industry is that of a school founded in 1861 to instruct those wishing to learn everything pertaining to weaving. This was a decided success, and in 1865 a spinning school was established. In order to obtain admission to these schools students must pass an examination to satisfy those in charge that they are capable of understanding the lectures delivered at these institutes. Said lectures comprise the theory of the construction of machinery employed in weaving and spinning, the formation of textures, drawing plans for mills, in short everything pertaining to the successful management of such establishments is taught. The period for study is two years. In the school is a collection of all kinds of machines for spinning and weaving. These are generously donated by a large firm at Mulhausen. As can be readily seen the benefit derived from these schools by the cotton industry is very great, and fully appreciated by the manufacturers, who are constantly stimulating the students by offering rewards, prizes, &c., as a recognition of deserved merit.

FRANK W. BALLOU,
Consul.

UNITED STATES CONSULATE,
Kehl, February 5, 1883.

THE TEXTILE TRADE OF SINGAPORE.

REPORT BY CONSUL STUDER.

In my dispatch No. 442, of May 15 last, I acknowledged the receipt of a department circular addressed to the United States consular officers in Europe, of date December 20, 1881, requesting information upon "textile fabrics," and presenting interrogatories for special information.

I now send, herewith inclosed, marked A, a report on such textile fabrics as find the readiest market in this colony; and, marked B, a report upon the same subject by Mr. Ludwig Huttenbach (of the firm of Hatz Bros.), United States consular agent at Penang, with samples of the goods mentioned in his report. I am much indebted to Mr. L. Huttenbach for his valuable experience and assistance in this matter.

The Department circular of December 20, 1881, contains two paragraphs, which run as follows:

> 1. Consuls are requested to forward samples of printed fabrics, &c., sold in their districts, where they can be obtained, giving widths, lengths, and current wholesale prices.
>
> 2. They are requested to obtain special information on the subject of packing, as it is thought that our manufacturers have much to learn from Europe in this regard, more particularly in that branch of the business intended for the export trade.

The said circular also recommended that consuls apply to such firms as might bestow information in furtherance of the object, and that such firms be named by them to the Department in their respective reports.

Having been very busy with my official duties, I had not the opportunities for making such close observations of the textile fabrics finding a more or less ready market in this colony. Still, a long residence here, employed in investigations of a commercial nature that might be of use to American commerce and manufactures, has enabled me to learn much about the commercial conditions of textile fabrics.

For specific information upon textile fabrics, in the preparation of a report, I thought it best to apply to the firm of Katz Brothers, doing business at Singapore and Penang, and at all times well disposed to introduce American goods and to carry on a reciprocal American trade, the manager of this firm at Penang, Mr. Ludwig Hüttenbach, being the United States consular agent at that port. This gentleman not only made up a report, but also forwarded to me samples of all the goods, duly classified and numbered, to correspond implicitly with their mention in his communication.

Jeans, bed-ticking, striped and blue shirtings, &c., used in working shirts, jumpers, overalls, &c., he did not embrace in his report, because their sale in this colony and adjacent countries is not very large. If our cotton manufacturers once succeed in getting a sure footing in most of the articles he does mention, those other fabrics just alluded to can be gradually introduced. The matter will take care of itself, *provided the manufacturers will consign at first, exercise patience, and not look to big profits, if any, at first;* and this I very earnestly recommend in view of the great ultimate advantages sure to accrue.

Mr. Hüttenbach's report herewith is brief, systematic, very instructive, based upon sound practical experience gained during a number of years in the active pursuit of business.

The sale of cotton fabrics in Penang and Singapore (the latter especially being the chief market and distributing place for all adjacent colonies, provinces, and the larger portion of the Indo-Malayan Archipelago) is simply immense.

Mr. Hüttenbach confined himself to those fabrics which are best known and most in demand by the natives, viz:

a. Gray shirtings (unbleached).
b. White shirtings (bleached).
c. Drills.
d. Sheetings.
e. Cambrics.
f. Turkey-red cloth.
g. Sarongs.
h. Prints.

And in *j* he shows the manner and mode of packing of each kind mentioned.

In reality his report leaves little for me to say; still I venture to make a few remarks, which I hope may be of some advantage.

As regards "gray shirtings" and "sheetings," and the modes observed in England to render them, by "sizing," artificially heavy, in order to offer "heavy cloth for little money" in the Eastern markets, the importers here and the traders, and a great many consumers, know that the goods are starched. The retail trader says to his native customer: "See, this is a heavy cloth, of such width and length, weighing so much per piece" (he can demonstrate it). "I can let you have this by the piece or yard for so much." Perhaps it is found too dear, and as a clever trader he will accommodatingly say: "Here is a piece a little less wide, therefore a little lighter, but not poorer in quality," and so on, either the same quality and less breadth, or the same breadth but lighter in weight. A bargain is finally made, and, regardless of breadth, length, or weight, the purchaser receives starched goods.

It will be seen in Mr. Hüttenbach's report that the same article is sold in England to weigh different weights, though of the same breadth or length, at different prices. That is to say, a piece weighing so much to cost so much, free on board Liverpool; or that another tissue is woven into different breadths, as well as lengths (quality the same for all), that a variance of different measurements is produced, all being starched alike. These various differences, perhaps more than the starch, enable all kinds of Eastern traders in cotton fabrics to be accommodating to customers, and there is wisdom in being watchful and well posted in purchasing.

Now, let a trader endeavor to introduce unstarched cloth, the pure article, and say to a customer: "Here, I have another cloth that will wear much better, it will cost you so much" (all depending on width, length, quality), perhaps a little more per yard than the standard article. Now, the latter held alongside of starched cloth will hardly bear comparison; it feels flimsy between the fingers, the tissues appear loose and light, and he will say: "What, pay you more (or as much) for this light stuff!" Answer: "Yes." Purchaser: "Weigh a piece of either, so I can see the difference." The trader weighs, and the unstarched American piece will weigh a trifle less than the starched, but the difference is less than the starch in the other would weigh. The starch, of course, cannot be weighed until the piece *has been washed and dried*. The native average purchaser, having seen nothing else, will naturally say: "You must think I am demented to pay you more, or as much, for this new, light cloth as for the heavy." But the trader, eager to try whether the unstarched American shirting or sheeting cannot be introduced, or to introduce it, knows that without a preliminary sacrifice made to a good customer he is not likely to succeed, and will say: "Well, then, if you will buy some of the cloth you have been in the habit of buying, I will give you enough for a kabayua (sacque) free of charge (or at a very low figure) of this new fabric, on condition that you make one, also, of the starched fabric you bought, and wear them and wash them both alike, alternately, and then let me know which of the two wore the longest," &c. This being no hardship, and probably curious to find out whether this new fabric is really better than the heavier-looking one, he will readily agree, especially if he has a large family. Of course the unstarched, if well made and of good material, will wear longer and better, and very likely he will make this known to his neighbors; most certainly if he does not, his wife will.

That's what I wanted to show; and what is true in retail is true in wholesale, only in a different way.

To introduce unbleached American shirtings and sheetings successfully requires time and patience; all the more as they are better and consequently dearer than the English starched goods of the same weight. All classes alike are accustomed to the latter, and, knowing nothing of any other kind, the importers here of cotton goods find little or no trouble in selling the English starched goods, which are cheap when compared with American manufactures, and offer more manipulations owing to the many grades. Traders dread the time coming when the consumers will buy the American goods in preference, and *ask for them*.

What a manufacturer must do (unless he himself establishes a firm or firms in a place or places in the East) in order to introduce gray shirtings, sheetings, &c., successfully, is first to secure a good, reliable firm and consign to them with the understanding that until a real demand for his fabrics takes place he not only expects no profits, but is willing to fully trust to and abide by what his consignees do. Understanding Eastern nations as I have learned to understand them, I would at first let a retail dealer have a small quantity of shirting or sheeting, weighing, say, 7 or 8 pounds apiece, for the same price, if I could not get more, as the English standard of the same weight, and at the same time go to some trouble in demonstrating, in a practical, striking way, the difference between American cloth, free of starch, and the English, starched, of the same weight.

It will be seen in Mr. Hüttenbach's report, under the caption of "gray shirtings," that of the latter certain kinds are bought by the Chinese (also of cambrics) for the special purpose of being dyed blue and to be made into trousers, jackets, &c. He did not allude to the fact the less starch there is in the cloth the better it can be dyed, and that heavily starched cloth can hardly be dyed or not at all.

In this colony indigo is grown and manufactured into dye-stuff by Chinese planters, and there are dyeing establishments where cotton fabrics are dyed blue, but not nearly as many as there are in China; and this, I have no doubt, accounts in a measure for the fact that the demand for American fabrics has been steadily increasing there. Besides, in China they have a winter, while here there is none, and as a consequence the Chinese require warmer and heavier material.

For one kind of American sheeting, wide, heavy, and very good, to which Mr. Hüttenbach alludes, and of which he forwards a sample, though it is high priced as compared with the English article, a market has been created, and it is introduced successfully in Penang more than at Singapore.

In *drills* it is conceded that those of American manufacture beat the English by reason of superior quality rather than in price. It was a struggle of several years until American drills found a sure footing, and the demand for them is now steadily increasing. The cloth is so good and strong that people generally have learned to use it in many more ways than they did formerly; they are chiefly used by Europeans and those following Western civilization, and also by large numbers of natives, seafaring Malays especially, for loose jackets and trousers. The kinds of American drills most in demand are represented by samples with Mr. Hüttenbach's report. The northern half of the peninsula of Malacca, Siam proper, and Burmah ought to prove a very good paying field for the drills and heavy sheetings above alluded to.

Bleached shirtings (also muslins and cambrics) have an immense sale in the East; but as regards this colony I regret to say American shirtings have not found a footing as yet, although some small quantities have been imported upon orders (not consignments) to try the markets. I invite earnest attention to what Mr. Hüttenbach says upon this fabric in his report, his firm in particular having imported some and endeavored to introduce them. He says that they do not appear to the same advantage as those of English manufacture, and consequently, though hey are probably just as strong and durable as the latter, they will not fetch the same price. Consequently there is no profit in them, and, unless they can be had cheaper, no inducement to import them.

American manufacturers can send to the East just as good and well-made shirtings and muslins as the English can; for they have excellent machinery and live in the land of cotton. They can get fair to good Louisiana and Sea Island cotton for chain and frame, and can spin as fine and even a thread as in Europe; knotty, uneven thread can, of course, never make a smooth, even tissue, no matter how good the weaver. That seems to be the whole secret, together with a careful study of economy in the manufacture.

There is no doubt about the ability of American manufacturers to turn out just as good muslins and cambrics as those of England, and the only question that remains is whether they care to enter, as regards the markets of the East, into competition with European manufacturers. I presume that the cost of manufacture is the most important question in this matter.

Turkey-red cloth has a large sale throughout British and Dutch India and the Philippine Islands, with the Sulu Archipelago. It is used by the natives in many ways; the color is such a fine bright red, and they like that. They use it in turbans, wearing apparel, upholstery, curtains, &c. I invite close examination of the sample sent by Mr. Hüttenbach. It will be found to be simply a very good article of muslin, well woven, strong and fine, and dyed Turkey red; the color being *fast* or proof against washing. I have been told by experts in this and kindred articles that good dyeing, to bring out the true shade brilliantly and evenly, is fully as important as the manufacture of the cloth; and it is really surprising that the few factories engaged in its manufacture in Eastern Switzerland have never yet had any competitors proving dangerous to them.

Next come *sarongs*. Mr. Hüttenbach draws attention to the great importance of these goods, worn by both sexes.

The manufacture of sarongs is, owing to the different tastes and notions of the native wearers of Southern Asia, a never-ending study for the importers in the East as well as for the manufacturers in Europe.

Pages upon pages might be filled in the endeavor to convey ideas about the many tastes and fancies, and to furnish descriptions of patterns and designs to no purpose. Any American manufacturer that would like to engage in the manufacture of sarongs and head-cloths (slendongs) and kindred goods used by the same people *should make that a specialty*, and visit the factories to learn their manufacture, in Switzerland chiefly, also in Holland for the imitations of designs of true native-made sarongs of Java first; and the East should then be visited and carefully studied, going from one country to another, and the different tastes, fancies, and customs of the people and tribes observed. This should only be undertaken by young men already familiar with the manufacture of cotton goods, ginghams, and prints especially, and when they feel competent to enter upon the manufacture of sarongs, &c., they should select for agents in the East, if possible, men who, as apprentices of commerce, have spent two or three years in a sarong manufacturing firm, in order to continue "well posted" about changes in patterns and designs in the East, and also to facilitate the sale of the goods sent to them. These conditions are essential to success, though I am willing to admit that *importers* who have never been in sarong factories, but have dealt in the article for a long time, occasionally become very good judges. Manufacturers of ginghams would soon become adepts in the manufacture of sarongs; but it must be taken into consideration that this article, unlike shirtings, sheetings, drills, prints, &c., find no market in the United States, and are only worn in Southern Asia, chiefly on the peninsula of Malacca, and throughout the Indo-Malayan Archipelago. Factories engaged in this article, with an experience of many years, seem to be fully able to supply the demand from the East. Still I can say that, to my knowledge, great fortunes have been made in the sarong trade. On the whole, however, it would be advisable at the present time to direct attention to the manufacture in America, and export therefrom of *prints*, as being of far greater importance and sale than sarongs.

I have written in former reports of the great importance of the prints or calico trade throughout Southern Asia, but the goods in market in this colony were *all* of European make since our war of rebellion.

It is true American calicoes have been sold of late years in Java, and while I mention this I will also say what a reliable merchant, who dealt largely in this article, told me he experienced. He said it would pay American calico manufacturers to come out here and study the trade in prints, and particularly the trades and fancies of the natives. He further stated that among the calicoes his firm received from America there were some excellent designs and patterns, printed on very good cloth, that sold well; but occasionally poor, uninteresting designs were printed on equally good cloth, costing just as much as the good patterns alluded to, and that as a consequence, in order to get rid of them, they had to sell them at a lower figure. The use of this same good cloth for less pleasing patterns is therefore a mistake, and it also occurred, he continued, that they received very nice patterns printed on cheap cloth, which if printed on better cloth would have commanded a higher figure.

He recommended that different grades of cloth (at corresponding prices) be used; that the best cloth always be used for the best and latest patterns, and so on. The natives, though they never changed the fashion of their wearing apparel, have their changes of fashion nevertheless in the patterns of sarongs and prints. Whenever, he stated, they received new goods and exhibited the samples thereof, certain patterns would take well and have a rapid sale for about six weeks or two months, and thereafter they would become difficult of sale. A frequent change in patterns is therefore necessary, as well as a thorough understanding between the merchant in the East and the manufacturer in the United States; and in order to facilitate communications a code of words for telegraphic messages should be arranged.

The samples sent East should be duly classified, numbered, and thus placed on file. Sometimes a pattern has a large sale and the supply on hand is not equal to the demand. There is also a good deal of crimping done among merchants importing, in this, that, when they discover that a firm has imported patterns creating a demand, they get hold of samples of the same and send them by first mail to their correspondents to be copied, and order supplies of the same as quickly as possible. This every importer of prints has to fear; therefore, where it happens that his stock of a good pattern is unlikely to meet the demand, and should the demand be likely to last for some time he should order a fresh supply per telegraph and have the supply on hand sufficiently large to last until the demand for this pattern ceases, even if he should not be able to sell all until then. By so doing he will beat his crimping competitor. The goods upon receipt of order, if not already made, can soon be printed and shipped; while the manufacturer, who by mail receives a pattern for imitation, must first get it cut before he can print and fill the order, and then probably the goods arrive in the East when the pattern has ceased to be in demand.

The telegraphic code should be so arranged that the merchant can shape his order so as to send but one word.

For instance, a petition is classed and numbered A[1]; he wants, say, 10 cases (the number of pieces per case must be uniform and agreed upon) of this; *one* code-word should cover this. All this can be systematically arranged without much difficulty.

I fail to see why American "prints" should not find a large sale everywhere in Southern Asia; but any American manufacturer, in order to do a good business in this part of the world, must first visit it and study the trade and its connections, especially the tastes and fancies of the natives. By frequently visiting the bazaars of native traders one can learn fully as much as in importing houses. A trip to the East, when not too hurriedly made, is very instructive, on general principles, and may bear interest.

I invite, finally, careful attention to the mode and manner of *packing* of the different fabrics, as explained in Mr. Hüttenbach's report.

I will not close without remarking that "cheap freights" (at fixed rates, too) is an important factor in the successful sale of American goods, generally, in the East, and that *direct routes* are greatly to be preferred to those subject to transshipment, for various and good reasons.

A. G. STUDER, *Consul.*

UNITED STATES CONSULATE,
Singapore, September 27, 1882.

COTTON GOODS TRADE OF PENANG.

REPORT BY CONSULAR AGENT HUTTENBACH.

The honorable Secretary of State, by circular dated Washington, December 20, 1881, having directed the consular officers to give such information about cotton goods as might prove useful to the manufacturers of the United States, I have the honor to submit the following report:

The circular in question, it is evident, is intended for information from manufacturing quarters. This country, however, being a consuming one, my report cannot deal with the matter in the sense of the circular; still, as the object of the same can only be to obtain such information as might be conducive to a development of the American trade in the above goods, I am inclined to believe that the knowledge of the opinion and of the wishes of the consumers, whereby a larger field for the sale of American goods might be opened, might be just as (if not more) useful than any economy or improvement which might result from observations gathered in the manufacturing countries.

The principal articles which command an important and ready sale in our and the neighboring ports are the following, viz:

a. Gray shirtings.
b. White shirtings.
c. Drills.

d. Sheetings.
e. Cambrics.
f. Turkey-red cloth.
g. Sarongs.
h. Prints.

The simplest way of placing the manufacturers in a position to judge which qualities are most salable here is, in my opinion, to offer them samples. I beg, therefore, to send herewith samples of the whole widths of the various goods, and in the inclosure I beg to forward a special report on each kind, in which, according to the instructions contained in the circular, I took special care to give as detailed information about packing as possible.

The wholesale prices now current in our market are also mentioned in these reports. It stands to reason that these prices are subject to constant fluctuations according to the state of the home markets.

The rate of exchange of late has been on average of 3*s.* 9½*d.* sterling per Mexican dollar for 4 months' sight bank paper on London. This rate, though of course also fluctuating, may be taken as a fair basis for calculations.

In case anything in the reports should call for further information, I need not say that, on my attention being called to it, I shall be glad to give the same.

L. HÜTTENBACH,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Penang, *August* 30, 1882.

---

a. GRAY SHIRTINGS.

P. 1.—Packed in bales of 50 pieces, 39 inches wide, 38¼ yards long, weighing 8¼ pounds English; present price in England 7*s.* 4*d.* to 7*s.* 5*d.* f. o. b. Liverpool.

P. 2.—Packing, width, length, weight the same as P. 1; present price in Europe 6*s.* 10*d.* f. o. b. Liverpool.

These shirtings are imported here also of the same length and width, but weighing 7 and 6 pounds only.

The two qualities, as per samples, are salable at Mexican $42 to $43 per 20 pieces, less 4 per cent. for cash, while P. 2 *a* might realize Mexican $30 to $31, if weighing 7 pounds, and abont Mexican $28 for 6 pounds.

P. 1 and 2 have a very large sale, as, after being dyed blue, they are used by Chinese for trousers.

American goods of the above quality could, so far, not be imported with advantage; they are too dear, and do not weigh enough. The English stuff is made of inferior material, and apparently heavier, by much starch being used.

P. 3 is of American manufacture, and will best illustrate the above remarks; these goods, 39–38 inches wide, and 7¾ to 7½ pounds, stand in first cost in New York 5¾ American cents per yard.

P. 4.—Also in bales of 50 pieces, 45–44 inches, 39 yards, 10¼ to 11 pounds, and costing now f. o. b. Liverpool 10*s.* 10*d.*, realizes here Mexican $69, less 4 per cent. for cash, for 20 pieces.

This quality is largely bought for Northern Sumatra.

P. 5.—Packed as above, 36 inches, 26 yards, costing 5*s.* 2*d.* to 5*s.* 3*d.* f. o. b. Liverpool, has only a limited sale.

P. 6.—Gray supers, in bales of 50 pieces, 36 inches, 26 yards, costing 5*s.* 1½*d.* to 5*s.* 2*d.* f. o. b. Liverpool, are imported in different qualities (or classifications); the sample represents a middle quality, which sells at (Mexican), $32 to $34, less 4 per cent. for cash, per 20 pieces.

P. 7.—Fetches the same price; it is only 34 inches wide, but on the other hand is of superior quality to 36-inch; packing and length is the same as P. 6; weight 5 pounds English.

P. 8.—Gray T-cloth, 50 pieces per bale, 32 inches, 24 yards, 6 pounds, at 3*s.* 7½*d.* f. o. b. Liverpool.

P. 9.—Gray T-cloth, 50 pieces per bale, 32 inches, 24 yards, 7 pounds, at 4*s.* f. o. b. Leverpool.

P. 10.—Gray T-cloth, 50 pieces per bale, 32 inches, 24 yards, 7 pounds, at 4*s.* 4*d.* f. o. b. Liverpool.

P. 11.—Gray T-cloth, 50 pieces per bale, 32 inches, 24 yards, 7 pounds, at 6*s.* 3*d.* f. o. b. Liverpool.

P. 12.—Gray T-cloth, 50 pieces per bale, 32 inches, 24 yards, 7½ pounds, at 6*s.* 6*d.* f. o. b. Liverpool.

These T-cloths command also a very important sale in this market; the price is regulated by larger or smaller stocks, and varies from (Mexican), $22 to $32.50, less 4 per cent. for cash, per 20 pieces, according to quality.

In all the above goods, no American manufactures could be imported here, as, the quality being too good, the price would have to be, of course, correspondingly higher. The buyers in this country are very conservative, and the only way by which American goods could be introduced would be by making as near an imitation of English qualities as possible by using inferior material and much starch, by the employment of the latter, of which the weight is artificially rendered much heavier.

b. WHITE SHIRTINGS.

The white shirtings sold in this market, come, as far as I could ascertain, exclusively from England; the shirtings manufactured in America cannot compete with those from England, as the former are by far less nicely finished, are of coarser thread, and are dearer.

In report j, I give full details about packing of the various goods; the way in which shirtings are finished is explicitly described in the report. Even with the long introduced favorite English goods only a very limited profit (sometimes none at all) can be realized, and it stands to reason, therefore, that no importer cares to order trial shipments of unknown American goods, which, the first time, are almost certain to result in a loss.

If, however, the American manufactures are made as near the English as possible, I would see no reason why the former should in the long run not become as well liked as the latter. As American goods are even exported to Europe, there can be no doubt that, both as regard quality and price, the United States are quite able to compete in this country. The conservative spirit of its population, to which I alluded already in report *a*, has to be overcome, and this in the first place requires time.

As stated, it is not to be expected that any merchant would import American manufactures on his own account, and if the United States manufacturers are anxious to introduce their white shirtings, it can, in my opinion, only be achieved by their sending consignments for their account, as only in this manner it would be possible to make their brands known gradually, and thus open them a large field.

The samples which are herewith forwarded will give some idea as to which qualities are salable and what prices they will realize. There are a good many more qualities in the market, but I presume that the samples sent will quite answer the purpose.

The goods are packed in cases of 50 pieces; the prices are in Mexican dollars for 1 corge, equal to 20 pieces, cash, less 4 per cent. discount:

P. 21.—36 inches, 40 yards per piece, selling at $78.

P. 22.—36 inches, 40 yards per piece, selling at $73.

P. 23.—36 inches, 40 yards per piece, selling at $68, latest quotation from England, 10*s.* 9*d.* f. o. b. Liverpool.

P. 24.—36 inches, 40 yards, costing f. o. b. Liverpool 9*s.* 3*d.*, sells at $56.

P. 25.—36 inches, 40 yards, costing f. o. b. Liverpool 9*s.* 1½*d*, sells at $54.50.

c. DRILLS.

In drills it is just the contrary than with white shirtings, viz: In this article the United States have carried off the palm, and the English goods meet only with a small sale in comparison to American products.

The favorite quality in this market is the one as per sample

P. 13.—30 inches, 40 yards (in bales of 15 pieces), which, however, at present fetches only (Mexican) $79, less 4 per cent. cash, of 20 pieces, while first-cost in New York, United States currency, is 7½ cents per yard.

American goods have so far only been imported of this superior quality; but of English origin, inferior brands come to this market from time to time; they are, however, in addition to the poorer quality, also of less width and do not attract the attention of buyers to any extent.

It is impossible just now to give any reliable quotations as to the selling prices of these inferior brands. They sell from $50 upwards, according to quality.

Although, as stated, P. 13 is the most important quality, I think it can be no harm to send also samples of the other (English) brands alluded to.

They are, as the American drills, also packed in bales of 15 pieces.

Paid per piece f. o. b. Liverpool:

P. 14.—27-26 inches, 30 yards, 9 pounds, English drills, 5*s.* 4½*d.*
P. 15.—27-26 inches, 30 yards, English drills, 5s. 7½*d.*
P. 16.—28-27 inches, 30 yards, 9¼ pounds, English drills, 6*s.* 1*d.*
P. 17.—28 inches, 40 yards, 14 pounds, English drills, 10*s.* 5*d*,
P. 18.—28 inches, 40 yards, 15 pounds, English drills, 10*s.* 11*d.*

Also in American drills, favorite as they are already, the trade could be still further increased by reducing the price. If the difference in price between the good and inferior qualities can, by any means, be made smaller, the latter would perhaps, in the course of time, be entirely neglected, whereby the consumption of the former would naturally become correspondingly larger.

If, through the information collected by the consular officers in the manufacturing quarters, goods can be manufactured more economically, this could partly lead to the above suggestions being carried out. About other measures, which, if followed out, would have a good effect on American trade with the East in general, I shall take the liberty to give my opinion in my "commercial review" at the end of the present quarter.

d. SHEETINGS.

P. 19.—Only the quality as represented by sample, 36 inches, 40 yards (packed in bales of 20 pieces), is, of all American manufactures, of good sale.

P. 20.—Are samples of finer American sheetings, which, however, cannot be disposed of in this market, as they cannot compete with English gray sheetings, which are cheaper.

In report *a* I dwelt more lengthily on this subject, and in order to avoid repetitions I beg to refer to the report just mentioned.

P. 19, costing in New York 7¼ to 7½ American cents per yard, realizes here up to $80 (Mexican), less 4 per cent. for cash, per corge of 20 pieces.

There are no other suggestions, besides those mentioned in report *a*, to be offered with regard to sheetings.

e. CAMBRICS.

Cambrics are also a very important article of import here; they come almost exclusively from Manchester, and, as far as I could ascertain, none have ever been manufactured in America.

The largest portion of cambrics imported are dyed blue here, and in that color are used to a very great extent; for instance, for Chinese trousers and sack coats.

Also, this article is packed very tastefully in the way fully described by me in report *j*.

There are many qualities in this market. The way of packing and finishing and the width and length of pieces are, however, exactly the same for all, and, in order to show the nature of the goods, it will, therefore, suffice to send some samples of the most salable kinds.

The qualities as per samples 26 to 29 go under the name of "Cambric Nos. 15 and 16," and those as per samples No. 30 under the name of "Cambric No. 24."

The selling prices, all understood per corge of 20 pieces, in Mexican dollars, less 4 per cent. for cash. There are 200 pieces in a case—10 corges.

P. 26.—42-3 inches, 12 yards per piece, costing f. o. b. Liverpool 3*s.* 10½*d.*, sell at $24.25.

P. 27.—42-3 inches, 12 yards per piece, costing f. o. b. Liverpool 3*s.* 7¾*d.*, sell at $22.50.

P. 28.—42-3 inches, 12 yards per piece, costing f. o. b. Liverpool 3*s.* 2*d.*, sell at $18.75.

P. 29.—42-3 inches, 12 yards per piece, costing f. o. b. Liverpool 2*s.* 11*d.*, sell at $17.50.

P. 30.—Cambric No. 24 is in packing, finishing, width, and length the same as cambric Nos. 15 and 16, but with the difference that it is made out of very poor quality of material; in fact, it might be said that the stuff consists to a greater extent of starch than of cloth.

This particular kind of cambric is used by the poorer classes of natives to wrap up corpses, a cheap price being of more importance than a good quality.

Sample No. 30, more than any other, will illustrate what great perfection the English have attained in fabricating goods rendered artificially heavy.

The article "cambrics," owing to the large sale it commands here, is well worthy the attention of manufacturers of the United States.

f. TURKEY-RED CLOTH.

This article is to the greatest extent manufactured in Switzerland, and but a small portion of said goods imported here comes from England. Those manufactured in Switzerland, however, have by far the preference, both on account of the good quality and low price.

There is not much to be said of this article, although it is not imported in such large quantities as drills, shirtings, &c.; still it commands a fair sale and can be recommended to the attention of American manufacturers.

Herewith samples of the two most salable qualities. There are 60 pieces packed in a case, and the price, as usual, is to be understood in Mexican dollars per corge of 20 pieces, less 4 per cent. discount for cash.

P. 34.—44–5 inches, in pieces of 24 yards, sells at $60; weight 4¾ pounds.

P. 35.—30 inches, 24 yards, weight (about) 2¼ pounds, sells at $45.

g. SARONGS.

Sarongs, and other goods related thereto, such as monchoirs (handkerchiefs), ginghams, shawls, &c., with an eye to "native trade," are beyond any doubt the most important articles of this country (Southern Asia, including the whole Malayan Archipelago), as they are unexceptionally worn by men, women, and children, and this colony is the chief market (Penang and Singapore) of the same.

This article can be called a specialty of Switzerland; a very small quantity finds its way from Holland—an imitation of the patterns and designs by natives in Java (called "battiks"), but all other countries, as far as my knowledge goes, do not manufacture these goods.

I am sorry that I cannot give as full details as the importance of the article renders it desirable. The border of a sarong, the number, &c., of threads, colors thereof, the designs, &c., all of such great importance that an insufficient or faulty description might be of very bad consequences. To give reliable information in all the details upon sarongs requires, in my opinion, a professional; and the only suggestion which I can offer is that manufacturers in the United States send a competent person first to Switzerland, in order to become fully acquainted with the mode or manner of manufacturing, and thereafter out to this country, to study the tastes and requirements, &c., of the native purchasers. The article is really of such great importance that I feel justified to make the above suggestion, and if it is carried out I shall, of course, be happy to render to the respective gentlemen all possible assistance.

Simply to give an idea of the nature of the goods, I forward herewith the samples, viz:

P. 32.—"Tringaun" sarong, 26–25 inches wide, and 160-156 inches long, sell at $13 (Mexican), less 4 per cent. for cash, per 20 pieces.

P. 33.—"Battick" sarong, 42 inches wide and 75 inches long, fetch about $10 per 20 pieces (20 pieces equal 1 corge). There are generally 20 to 25 corges packed in a case; but as to that there is no fixed rule, as sometimes they are packed in quantities just in execution of a certain order, say 10 or 15 corges.

h. PRINTS.

Prints, printed shirtings, or cambrics can be disposed of in very large quantities in this country. They are used to make jackets, sacques, loose light garments for the upper body, which are worn by natives, Chinese, Burmese, Siamese, Hindoos, and all Malays—with one word, by all classes of the native population, by both sexes, but chiefly by the female.

This article, both as regards colors and designs, is subject to constant changes, and there is always a lively inquiry after quite new patterns. To manufacture this article advantageously requires, consequently, a thorough knowledge of the market, viz, of the tastes of the natives, which, it will be understood, cannot possibly be given in a report, and can only be acquired by a personal study in this and adjacent countries and islands.

It will be seen that the colors are only visible on one side—printed by the use of a cylinder.

The prices vary according to the quality of the cloth and the colors and designs.

P. 31.—Is a series of samples of goods which were sold some time ago. I cannot give the exact price.

P. 31*a*.—29-8 inches, 24 yards, costs f. o. b. Liverpoo, 6*s.* 10*d.* per piece, and fetches (Mexican) $40 per corge of 20 pieces, less 4 per cent. discount. There are generally 60 pieces packed in a box.

j. PACKING.

Gray shirtings are packed in bales of 50 or 100 pieces. The bale (next to the goods) is first covered with packing-paper, and after that (over the paper) with tar-coated canvas, and lastly with the proper packing-canvas, which is carefully sewn up. Each bale is provided with five strong iron hoops.

White shirtings are packed in tin cases, and the latter covered with lumber (generally pine); *i. e.*, wooden boxes. There are generally 50 pieces in a case. Each piece is first wrapped up in white tissue-paper, and after that in yellow packing-paper, and then simply placed in the case in its whole length.

Cambrics likewise in tin and wooden cases. There are 10 corges (equal to 200 pieces in a case); 10 pieces are packed together, first wrapped (as a packet of 10) in white tissue-paper, then in brown packing-paper, and tied up with tape.

Turkey-red cloth partly comes to this market in wooden and tin cases; partly only in wooden cases lined with good card-board. The pieces are tied on both ends with a yellow string. There are generally 60 pieces in a case.

Sarongs likewise partly in wooden and tin cases, and partly in wooden cases lined with thick paper only. One-half corge, equal to 10 pieces, are packed in brown paper and tied up with tape. Quantity in each case according to the requirements of the buyer.

Prints are packed in the same way as cambrics.

Drills, 15 pieces in a bale. The manner in which this is packed by the American manufacturers—viz., their paper and canvas and tied with ropes—is insufficient, as generally a large portion of the bales arrive in a torn and damaged state. Perhaps the way in which "gray shirtings" are packed, as above shown, could be recommended in order to avoid damage of the kind shown.

Sheetings are packed in the same way as drills. The remarks made under the latter heading are applicable also to this article.

L. HÜTTENBACH,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Penang, August 30, 1882.

BRITISH ANNEXATION OF NEW GUINEA.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The annexation of territory by the colonial authorities forms a new era in the history of Great Britain. It is certainly a departure from the usual method pursued by that empire, and is, so far as I know, wholly without precedent in the history of any other country. It is a precedent, however, which, in the event of being sanctioned by the Imperial Government, will doubtless open up a new field of aggression for colonial statesmen.

The proclamation was made on the 4th of April last, being read officially at Port Moresby by Mr. Chester, the resident magistrate of Thursday Island, Torres Straits, who acted on instructions from the Queensland Government. The proclamation is as follows:

> I, Henry Majoribanks Chester, resident magistrate at Thursday Island, in the colony of Queensland, acting under instructions of the Government of said colony, do hereby take possession of all that portion of New Guinea and the islands and islets adjacent thereto lying between the 141st and the 155th meridian of east longitude, in the name and on behalf of Her Most Gracious Majesty Queen Victoria, her heirs and successors.
>
> In token whereof I have hoisted and saluted the British flag at Port Moresby, New Guinea, this 4th day of April, in the year of our Lord 1883.
>
> God save the Queen!
>
> HENRY M. CHESTER.

About thirteen Europeans and two hundred natives were present at the reading of the proclamation.

Toward the close of the proceedings a royal salute was fired and three cheers given for Her Majesty the Queen. Mr. Chester then formally recognized Boe Vagi as the head chief of Port Moresby, and presented him with the British flag.

It will be seen by a glance at the map that the proclamation embraces a large extent of territory, including the Admiralty Islands, the New Britain group, and others. In the New Britain group there are two islands of considerable size, viz, New Britain and New Ireland, the former being 300 miles long, with an average width of 30 miles, and the latter 337 miles in length, and about 12 miles wide. The proclamation does not refer to the territory claimed by the Netherlands west of the 141st meridian of east longitude.

Various reasons have been assigned for the action of the Queensland Government in taking possession of New Guinea. The subject has been a very popular one with the Australasian colonists for many years, and the correspondence between the colonial authorities and the home Government in regard to the matter has been both energetic and voluminous. In 1875 Sir Hercules Robinson, who was then governor of New South Wales, pressed the annexation very strongly on the Imperial Government, and the Earl of Carnarvon, the secretary of state for the colonies, in replying to that gentleman stated clearly enough that the British Crown was not adverse to the annexation. He was of the opinion, however, that the cost of the enterprise should be borne by the colonies themselves. He said:

> There is not only no disinclination but a hearty willingness on the part of the people and Parliament of Britain to accept, whether in expense or in political responsibilities, the common burdens of that empire of which they are so justly proud, but it is simply impossible either for me to admit, or, if even I were to make the admission, to persuade the English people, that the Australian colonies have no special interest in the annexation of New Guinea, and that the responsibility rests exclusively with the Imperial Government.

The subject was allowed to rest for a while, but was very soon opened again by the Government of Queensland in inviting the colony of New South Wales to co-operate with her in bringing about the annexation. Nothing, however, came of this joint action, and while every one of the colonies sympathized with the movement the Government of Queensland appears to have been allowed to conduct the matter alone.

Mr. Archer, the agent-general of Queensland at London, some months ago addressed an official communication to the Imperial Government, asking the sanction of the Crown to the annexation, and at the same time stating emphatically that the Government of Queensland was not only willing but fully prepared to incur the necessary expenditure of governing the island. Upon receipt of the communication Sir Arthur Kennedy, the governor of Queensland, was instructed by the Imperial Government to report fully upon the subject. Sir Arthur's report was, I learn, forwarded to London in March last, but the character of it has not up to the present time been made public.

The colony of Queensland is taking very great interest in the cultivation of sugar and cotton. Indeed these two commodities bid fair to become her most important articles of export. During the last few years she has made strenuous efforts to promote these industries. The labor question has been the principal obstacle in the way. The right kind of help cannot be obtained from amongst the Australian blacks, who are rapidly disappearing, and the cost of introducing suitable labor from the Polynesian Islands is about $70 per head.

The inhabitants of New Guinea are said to be better adapted for working in sugar and cotton plantations than any other in the world, and they could easily be brought to Queensland at an expense of a few shillings per head. The Rev. W. G. Lawes, a well-known New Guinea missionary, however, contends that native labor cannot be got from that island "without force or deceit." He says:

> I speak with certainty when I say that those who are desirous of getting labor fairly, treating them honestly, and returning them faithfully will certainly be disappointed in this quarter.

He says further that not a single New Guinea native can be found even amongst the motley crew on the Pearl Shell and Beche de Mere Stations, in Torres Straits, where men are greatly needed.

Mr. Lawes is nevertheless strongly in favor of the annexation of the island.

The colony of Queensland has had to undergo, recently in London, the severest criticism for alleged cruel treatment of their Polynesian laborers. It has been said that the Queensland squatters not only habitually murder their own blacks but kill off their Polynesian laborers just before the period of their term expires, in order to save the wages that would then be due them, and the expense of returning them to their homes.

It must be borne in mind that the Queensland blacks are amongst the most cruel and treacherous in the southern hemisphere. The Government on that account has not unfrequently been compelled to resort to extreme measures in punishing them, in order to protect the lives and property of the European settlers. The stories, however, about the murder of their laborers before the expiration of their time of service are undoubtedly false, but they have been repeated so often that an imperial commission has been appointed to investigate the matter.

G. W. GRIFFIN, *Consul.*

UNITED STATES CONSULATE,
Auckland, *May* 21, 1883.

THE ISLAND OF NEW GUINEA.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The recent action of the Government of Queensland in taking formal possession in the name of the British Crown of a part of the territory of the island of New Guinea, and which, up to the latest advices, awaited the sanction of the Imperial Government at London, has induced me to place before the Department of State the following information concerning that interesting country.

Since Australia has been classed by geographers as a continent New Guinea is unquestionably the largest island in the world. It is 750 miles larger than the great island of Borneo, and is more than six times as large as the State of New York.

New Guinea or Papua lies wholly south of the equator, between the parallels 0° 22′ and 10° 42′ south latitude, and between the meridians of 130° 50′ and 150° 50′ east longitude. Its extreme length is 1,530 miles, and its breadth varies from 30 to 410 miles. It is separated on the south from Australia by the Straits of Endeavor and Torres, and on the east from New Britain by Dampier Strait. Its northern shores are washed by the Pacific Ocean, and on the west lie Ceram and other islands of the Molucca Sea.

The island appears to have been discovered by the Portuguese as far back as 1526, and it is known that the Spanish navigator Ynigo Ortez de Retes visited it in 1546, and first gave it the name of New Guinea on account of the resemblance of the inhabitants to the negro race.

In 1606 Torres took possession of it in the name of the King of Spain, and Tasman landed on the north coast in 1643. New Guinea was also visited by a number of Dutch navigators, who seem to be entitled to the honor of conducting nearly every important discovery on the island for a period of two hundred years. Its best known bays and rivers still have Dutch names. Dampier, the English navigator, in 1700, sailed along the north coast and discovered the straits bearing his name. In 1827 the Dutch established a small colony at Triton Bay, which shortly afterwards disappeared. In 1843 the commander of H. B. M. ship Fly conducted several explorations on the southeastern coast. Alfred R. Wallace discovered the village of Dorey, on the north coast, in 1858; but very little knowledge of the country was acquired until 1872, when the celebrated Italian explorer, Signor D'Albertis, penetrated toward the interior of the island and visited the town of Hatam and other places in the mountainous regions, where he obtained a magnificent collection of birds, plants, and insects. On account of ill health he was obliged to return home, but revisited the islands a few years later and established his headquarters at Yule Island, at the entrance of Hall Sound, 270 miles east of Torres Straits. It was opposite this place, on the main land, that the American traveler, Dr. James, in company with a Swede, Karl Thorngren, was murdered by the natives in 1876. The murder was committed by a tribe called the Roro, and, on the authority of Mr. Chalmers, was fearfully avenged in July, 1882, by the Lesi tribe, with whom Dr. James lived. The Lesi warriors captured a Roro native and compelled the latter to guide them to the village of Paitani, which was at once surrendered. The Roro people asked "Who are you?" The reply was, "We are the Lesi, come to pay you; you murdered foreigners; they did not pay you; they were afraid." After some further parleying all the inhabitants of the village, including the women and children, were either butchered or burnt to death, and the scene of their village the next morning was but a heap of blackened ashes.

THE INHABITANTS OF NEW GUINEA.

The island of New Guinea is so vast and the difficulty of communicating between the various settlements is so great that it would be a matter rather of surprise than otherwise if the native inhabitants did not appear to present several distinct types of race. The color of their complexion varies from a deep sooty brown or black to a shade not much darker than that of the Malay. The blood of the tribes dwelling along the coast has doubtless been intermixed with that of the inhabitants of other islands in the Pacific. The typical Papuan has a peculiar black, rough, wooly hair, the word *papua* being derived from the Malay *puapua*, meaning wooly or curly. In stature he is a little taller than the Australian blacks, who are invariably below the medium height. His frame is stouter and his limbs are more symmetrical. He has a long face, projecting eyebrows, and a large nose. In this respect he differs greatly from the native New Zealander, whose face is round and nose not at all prominent. The New Zealander, moreover, has straight black hair, and possesses a quieter and more dignified demeanor than the Papuan, who is habitually given to rollicking fun and fits of boisterous laughter.

12 JUL 83

Mr. Octavius C. Stone, who recently visited New Guinea, has described six of the principal tribes whom he met:

1st. The Ilema tribe, inhabiting the coast from Muro, a little north from Freshwater Bay, as far as Oiabu, situated about 10 miles above Yule Island (Laval), distant 50 miles.

2d. The Maiva tribe, inhabiting the coast from Oiabu to Kapatri, situated to the west of the Manumanu River, distance 45 miles.

3d. Motu tribe; territory extends along the coast from Kapatski to Kapakapa close to Round Head, distance 60 miles.

4th. The Kaitapa, living on eminences overlooking the sea, and occupying the country of the Motu.

5th. The Kairapunu tribe, extending along the seacoast from Kapakapa to Mura, distance 40 miles.

6th. The mountain tribe, called Koiari by the Motu, and Kuni by the Kirapuno, occupying a large area in the interior, whose limits are uncertain.

The Illema are not cannibals like the dark Papuans, and Mr. Stone classes them as a sort of intermediate tribe combining the characteristics of both the dark and light races.

Each of these tribes speak a different language or dialect, but these dialects greatly resemble one another, and can be traced to the same common origin. In fact, all their various forms of speech are governed by the same laws and grammatical principles. The accent is on the penultimate, and forms a certain guide for pronunciation. The language may be described as a soft and musical one. It is composed principally of vowels and liquids, and has no gutturals nor harsh sounding consonants.

The natives who reside near the Maikasa or Pearl River are believed to be cannibals. They live a roving, reckless, dare-devil sort of life. Their country is thinly populated and during the rainy seasons exceedingly unhealthy, on account of the prevalence of malaria.

The Papuans pierce their ears and nostrils and wear in them as ornaments bamboo sticks and bright colored feathers. Some of them file their teeth to a sharp point. Their faces are frightfully disfigured with huge dark welts, burnt in with red-hot coals and rubbed with various kinds of dyes. They pass their time principally in hunting and fishing, dancing and fighting. Their weapons consist of bows and arrows, clubs and spears. At Astrolabe Bay they have knives and axes of flint, and a whirl-bat made of hard wood exquisitely carved. The food of the various tribes consists principally of pigs, dogs, fowls, kangaroos, lizards, fish, insects, yams, cocoanuts, bananas, melons, mangoes, bread fruit, and sugar cane. They possess a rude knowledge of agriculture and cultivate extensive plantations, the soil everywhere being fertile, and break the ground with peculiar shaped sticks. Their houses are built of bamboo and raised on piles; some of their dwellings, however, have very low roofs, slanting almost to the ground. They possess a vague sort of belief in a Supreme Being, and erect temples for worship. They practice polygamy, and believe that a man has a perfect right to as many wives as he can support.

The inhabitants of the village of Dorey and along the shores of Geebrink Bay possess a much better intellect than the other tribes and often have European features. Dr. Beccari believes that they have Hindoo blood in their veins, and claims to be able to trace their religion to oriental origin. In the interior of the island the inhabitants display great skill in carving clubs out of a species of jade resembling the *pœnamu* or greenstone of New Zealand.

The Kirapuno tribe are described as being very handsome. The hair of their children is of a light golden color, which becomes darker as they grow older, turning first to a rich auburn and then black with an unmistakable reddish tinge.

All the tribes delight in painting their faces and bodies, their favorite colors being black, yellow, and red. They are addicted to murder, and their highest chiefs do not hesitate to beg and steal. The tatoo marks on the breasts of the chiefs indicate the number of men they have slain. They wear for ornaments head dresses made of the feathers of the bird of paradise, necklaces of boar tusks, and bracelets cut from a species of clear white shell. The men are noted for their slender waists, which approach almost to a deformity, brought about by drawing tightly around their bodies a girdle made of native cloth. The process is a very painful one, but is none the less practiced on that account. The women on the contrary delight in large waists, thus reversing the European fashion.

The villages are thinly populated and seldom contain more than ten or twelve houses, and generally less than that. The total aboriginal population of the island is variously estimated from 700,000 to 800,000. The Dutch have formed quite a cordon of settlements along the west coast, and carry on a profitable trade in exchanging commodities with the natives. They took possession of that part of New Guinea in 1828, during the visit of Captain Steinboom, of the ship Triton. They claim all the land lying west of 141° east longitude, and it is believed that the British Government will not dispute their right to it.

THE INTERIOR OF THE ISLAND.

Very little is known about the interior of the island, and with the exception of the voyages made up the Maikasa and Fly Rivers (the last of which was ascended to latitude 4° 30′ south), it may well be doubted whether any of the travelers have penetrated more than 20 or 30 miles within land. A large part of the country is mountainous, and some of the peaks in the southeastern portion of the island which can be distinctly seen in fine weather, are said to reach an altitude of 18,000 feet. Dr. Beccari ascended one of the Arfox range 6,500 feet, and expressed the opinion that the full height of the mountain was over 10,000 feet.

The island is believed to be well watered, and abounds in magnificent forests. The rivers, however, are not large, and few of them are navigable to any great distance. Mr. Stone in 1875, made a voyage up the Maikasa River in a steam launch accompanied by Mr. Mcfarlane, the missionary, and four South Sea islanders, but after traveling 64 miles, found that the river converged into two smaller ones, and that neither of them was deep enough to admit of the passage of his vessel. He took a small boat, however, and went some distance up the largest stream, along the banks of which he found yams, sugar-cane, and tobacco growing. Signor D'Albertis made several voyages up the Fly River, the last of which was in the little steamer Neva in 1877. This river he believes to be the largest in New Guinea. Its source is in the high mountains that cross the island from west to east, latitude 5° south and 142° east longitude. It flows toward the north through two ranges of hills which gradually increase in height. The river then takes a westerly direction, turns again to the east, flows through a flat and swampy country, and empties into the sea in latitude 8° 45′ south and longitude 144° east.

THE FAUNA AND FLORA.

The geological structure and the fauna and flora of New Guinea bear a strong resemblance to those of Australia, and this resemblance has led to the belief in the existence of gold in the island, and I have in my possession some specimens of quartz obtained from the mountainous regions, these having the appearance of gold-bearing veins. The indications certainly point to the existence of the precious metal in New Guinea, but it is exceedingly doubtful whether it has been found in sufficient quantities to justify an emigration to that country for gold-seeking purposes.

With the exception of a peculiar species of the wild pig and a few mice, there are no placental mammalia in the island. The list of marsupials is, however, large, and includes the tree kangaroo of the genus dendrolagus. Signor D'Albertis furnishes a catalogue of 173 species of birds, which he collected during his explorations in the Fly River in 1876–'77, many of which are peculiar to New Guinea. He also gives a catalogue of other species which he observed, but was unable to obtain specimens of them.

Mr. A. R. Wallace says that over 400 species of land birds in New Guinea have been described, which comprise a larger portion of gorgeously colored species than are to be found in any other country. He mentions 20 species of birds of paradise and an immense variety of kingfishers, parrots, and pigeons, including the rarest and most beautiful of their respective families.

Signor D'Albertis is often very eloquent in his description of the different species of the birds of paradise, with which he met during his travels. He dwells with special delight on the *Paradisa paggiana*, *Paradisa apoda*, and one of hybrid species to which he gave the name of Neva. Their sonorous notes seem to have had an indescribable charm for him. He says towards the end of his diary:

> I am accustomed to hear their note daily; it always has a fascination for me, but now that I am bidding farewell to this wild country, that note sounds sweeter than ever in my ears. It seems to invite me to remain.

All descriptions fail to give anything like an adequate idea of the beautiful and brilliant hues of the paradise birds peculiar to New Guinea. The American humming birds are said to come nearest to them in the fairy-like structure of their plumage, and in the gorgeous metallic and ever-changing luster of their colors.

The character of the vegetation of New Guinea, while like that of most tropical countries, has many features peculiarly its own. The foliage is often so dense as to shut out even the faintest gleam of sunlight. The island forms a sort of connecting link between the eastern and western world. One part of it seems the veritable home of Indian plants, and the other partakes of the Australian world. There appears to be strong reason for believing that at one time there existed a neck of land between New Guinea and Ceram, Bulu and Celebes, and also a neck of land between New Guinea and Australia.

Signor d'Albertis found the Malayan type of forests to predominate, but at the same time admits that large tracts of the country have an Australian look, the trees in many places being sparse and affording easy passage for men on horseback; the principal trees being the ***Eucalyptus papuana***, the ***Banksia dentata***, and several species of Accacia. Amongst the plants he found many that resembled those of Australia, such as the *Elacocarpus arnhemicus*, the *Tchelhammera multiflora* R. Br., the *Kentia* *wendlandina*, the *Australianum* Sm., but he thought it just as reasonble to believe that they were of Malayan type and migrated to Australia, as to believe that they were Australian plants which had migrated to New Guinea. Signor d'Albertis also found that the serpents of the island resemble those of both continents, and some of these he describes as very large, and of the most poisonous character.

Among the vegetable products of New Guinea, having a commercial value, may be mentioned various kinds of aromatic bark, such as the nutmeg and cinnamon.

G. W. GRIFFIN, *Consul.*

UNITED STATES CONSULATE,
Auckland, May 21, 1883.

NOTES.

Brazilian import duty on flour.—The consul-general at Rio gives the following information concerning the import of flour into Brazil:

In my annual report I stated that the duty imposed by Brazil on the import of wheat flour amounted to 64 cents per barrel. I would now state that if the same flour be shipped to the interior province of Minas Geraes it would, in addition, be subject to a provisional duty of $1.32 per barrel. The freight charge on a barrel of flour a distance of 200 miles on the Government railroad leading from this city into that province, being, as far as the road is now completed, $1.26. As Minas Geraes contains a population of over two millions it can be seen that its heavy tax can affect American flour trade very much.

American steamships for the Pacific trade.—Consul-General Andrews reports from Rio de Janeiro under date of June 10, 1883, that—

The new American steamship Mariposa, 1,939 tons, of the Oceanic Company, San Francisco, whither she is bound, arrived at Rio on the 8th in sixteen days and twenty-two hours from Philadelphia. Her master, H. Z. Howard, states that in latitude 16° 39′ north, longitude 41° 49′ west, May 27, he saw the wreck of a vessel, bottom side up, the keel of which was about 150 feet long, with her prow broken off as if by collision. From there being no grass or shells attached to it, he judged that the wreck had been recent. No spars were visible. In a general conversation Captain Howard said the Mariposa would be employed between San Francisco and the Hawaiian Islands; that other steamers were being built at Philadelphia for the same trade, and that Mr. Claus Spreckels, of San Francisco, the principal owner, had made large investments in American machinery for sugar mills in the Hawaiian Islands, in the belief that the reciprocity treaty would continue. Captain Howard, who is acquainted in Japan, is of the opinion that Great Britain is there gaining an ascendency over the United States in prestige.

Coffee exports from Brazil.—Under date of June 9, 1883, the consul-general at Rio de Janeiro reports:

The coffee export trade was unusually light during the two preceding months, being to the United States 310,788 bags, or 87,611 bags less than during the corresponding two months of 1882.

There seemed to be a dead lock at one time in the coffee trade, the exporters holding out for a higher price than the American purchasers were willing to give. A break was made during the past few days, the exporters getting their price. The crop of this year has not been harvested. There is nothing to indicate but that it will be a good one, though it is thought that it will not be quite as abundant as that of last year.

India and the United States.—Under date of March 23, 1883, Consul Farnham, of Bombay, reports as follows:

The financial statement of the Government of India for 1883–'84 is just out, and it bears upon America inasmuch as the question of India's competing with the United States as far as exporting wheat to Europe is concerned. America would appear to have an immense advantage over India excepting where wheat is shipped from San Francisco, as freight is much lower across the Atlantic from seaboard points of shipment excepting San Francisco. But the Government of India keeps in view that about 40 per cent. of the wheat shipped from the United States to Europe is shipped from San Francisco at a higher rate of freight than from India to Europe. The Government has just made a reduction of 18 per cent. on the railway charge for freight on wheat to Calcutta and Bombay, and recommends that railways in India should be constructed by private enterprise. Lord Ripon, the viceroy of India, has gone carefully into the figures, and he does not hesitate to say that he believes there is a deal of room for private enterprise in India. In 1870 not a pound of wheat was exported from Bombay. Last year the exports footed up to 8,359,082 cwts. In 1873 only 283,933 cwts. linseed were exported from Bombay. Last year the exports footed up to 3,199,670 cwts. With only about one-tenth of the railway that America has, India shipped last year one-eighth of the whole quantity of wheat sent to England from all parts of the world.

Egyptian Finances.

The following table exhibits the receipts and expenditure of the Egyptian Government during the year ending December 31, 1882.

RECEIPTS.

	Egyptian pounds.
1. Direct assessed taxes:	
Land-tax	5,236,667
Other assessed taxes	304,952
2. Indirect taxes and revenues:	
Justice	252,290
Custom-houses	711,600
Posts	87,625
City-toll	271,960
Salt	166,370
Other indirect taxes and revenues	347,458
3. Railways, telegraphs, and port of Alexandria:	
Railways and telegraphs	1,121,700
Helouân Railway	6,830
Port of Alexandria	65,015
4. Khedivial postal steamers	85,000
5. Revenues of other State administrations	88,980
6. Divers revenues	74,075
7. Divers products	43,404
8. Reimbursement of sums advanced to the villagers	26,070
9. Sums retained from salaries of employés to meet pension payments	56,560
	8,946,556
To be deducted:	
Dead direct taxes	200,000
Total receipts, $43,732,780, or	8,746,556

EXPENDITURES.

1. Tribute of Egypt to the Sublime Porte	678,486
2. Public debt	3,760,997
3. Civil list and allowances	315,000
4. Maïeh Sanieh (private cabinet of the Khedive)	59,725
5. Council of ministers	9,292
6. Ministry of foreign affairs	13,162
7. Ministry of finance	602,476
8. Ministry of war and marine:	
War	422,961
Marine	70,000
9. Ministry of public instruction	89,464
10. Ministry of interior	574,196
11. Ministry of justice	281,754
12. Ministry of public works	439,270
13. Railways, telegraphs, and port of Alexandria:	
Railways and telegraphs	471,912
Port of Alexandria	35,737
Railway of Helouân	6,616
14. Custom-houses	63,579
15. Posts	80,000
16. Khedivial postal steamers	120,000
17. Salt	49,082
18. Provision-stores and "Shounahs" of the State	15,295
19. Reserved funds for contingencies	50,000
20. Pensions	255,964
Total, $42,319,840, or	8,463,968

AGENCY AND CONSULATE-GENERAL OF THE UNITED STATES,
CAIRO, *May* 14, 1883.

Adulteration of wines and liquors in France.—Under date of March 10, 1883, Consul Wilson, of Nantes, reports as follows:

Referring to my dispatch No. 15, and that portion of it relating to the municipal laboratory at Paris, I now have the honor to inform the Department that I am credibly informed that the publication of its reports monthly, as has been its practice since its establishment, is to be suppressed; that this is done by the prefect of police upon the application of the society of wholesale wine merchants. I have known heretofore that there was much opposition among the wine merchants to this publication. This laboratory has proved a most efficient preventive of the adulteration and falsification of food and drink, and its aid would have been greater with more extended publicity. It would have been much increased, if pushed to the extent of publishing the names of the persons having sold, or offered for sale, the articles analyzed. That the wine merchants have procured, or labored to procure, the suppression of the publication of these reports, is evidence against the *bona fides* of their declared willingness to aid in the suppression of the traffic in adulterated and falsified wines and liquors.

Tobacco in Germany.—Consul Harper, of Munich, under date of March 14, 1883, supplies the following statistics concerning the crop, importation, and consumption of tobacco in the Empire of Germany:

In the year 1881–'82 there was planted in the German Empire 67,331 acres with tobacco. The crop was more favorable than in the nine preceding years. The total value of foreign tobacco imported into Germany in 1878–'79 was $33,558,000. This amount fell to $5,164,600 in 1879–'80, but rose again in 1881–'82 to $11,471,600. The duty on imported tobacco in 1881–'82 amounted to $5,960,351.10. The average consumption of raw tobacco for manufacturing purposes during the past ten years has been 74,402¼ tons yearly, or $3\frac{9}{10}$ pounds per head of the population.

Agriculture in Hayti.—Consul Goutier, of Cape Haytien, under date of March 28, 1883, reports that the Government, for the encouragement of agriculture, has presented several measures which have been sanctioned by the legislature, viz:

"Diminishing the duties on coffee," and to supply the loss of revenue on this staple, "by augmenting the duties on all importations"; "selling and leasing all government lands"; "contracting a loan"; "giving government lands to parties who reside upon, cultivate, and improve them for a stated number of years;" "obtaining for and distributing to agriculturists different kinds of seeds, principally cotton seeds, in order that they may vary their culture"; "encouraging the better preparation of coffee, the planting of fruit trees, and the extensive cultivation of the cocoa tree."

The cocoa tree (chocolate tree) is indigenous to San Domingo, and was transplanted in Hayti in 1665. The sugar-cane was brought from the Canary Isles to San Domingo in 1506, and the coffee tree was transplanted here from the island of Martinique in 1728. Columbus found both cotton and tobacco when he discovered this island.

The Government will encourage the cultivation of the sugar-cane for the purpose of making sugar. An agricultural bank will be established during the present year, with a capital of 50,000,000 francs, where agriculturists and others can obtain loans on mortgage, with easy terms of payment.

Austria and the Boston Exhibition.—Under date of May 26, 1883, Consul-General Weaver, of Vienna, reports to the Department as follows:

The efforts made to secure a fair representation of Vienna industry and art at the Boston Exhibition are being crowned with remarkable success.

Although it was at first feared that the lack of time from the issuance of the circulars to the opening of the exhibition would prevent many from participating, who otherwise might have done so, yet at the instance of a few individuals, the patronage of a large and wealthy commercial society of this city, the Austro-Hungarian Export Association was secured, to the end that by the time Mr. Haas, the general agent of the exhibition arrived, success had in general been secured by the adherence of from sixty to seventy of the largest manufacturers and exporters of this city, comprising the glass, porcelain, button, leather, fancy articles, musical instruments, beer, and other industries of this city and suburbs.

Last Tuesday evening a meeting of the exhibitors and others interested was held in the exchange attended by about one hundred individuals for the purpose of making arrangements for the necessary committees and delegates. Under the auspices of the Export-Verein above mentioned, a local committee was formed, and a resolution passed to send out two delegates to Boston. It was hoped that they might so far receive the recognition of the Government that the minister of commerce would name from his department at least one member of the Vienna committee, and that the Government might authorize their consul at Boston to act with the delegates sent out, and thus give an official character to the commission at Boston. At all events, comparative success has been secured, and a very respectable exhibit will be made by the leading firms of this city, to the number of possibly one hundred, thanks to the energy of the president of the Export-Verein, aided by the zeal and untiring energy of Mr. Haas and others.

Silk trade of France for 1882.—The following is a report by Consul Peixotto, of Lyons:

The silk commerce of France for 1882, according to the very latest attainable statistics (exports and imports) has amounted to $66,006,000.

Including all kinds of silk manufactured goods, the exports amounted to $58,093,000; the imports, $7,913,000.

In 1881 the exports were $47,285,000; in 1880, $45,162,000.

The increase in the exports of silk manufactures from France to foreign countries for the past year over 1881 were $10,808,000, and ever those of 1880 $12,931,000.

The different classes and amounts of these goods for the past three years were as follows:

Exports of French silk goods, 1880–1882.

Description.	1880.	1881.	1882.
Plain goods (pure silk)	$18, 528, 000	$18, 335, 000	$23, 932, 000
Figured and fancy (pure silk)	2, 895, 000	2, 895, 000	3, 667, 000
Mixed silk goods (plain and fancy)	12, 545, 000	12, 931, 000	14, 089, 000
Silk crapes and gauzes	2, 123, 000	2, 316, 000	2, 316, 000
Silk tules and laces	1, 351, 000	3, 088, 000	4, 825, 000
Silk handkerchiefs, cravats, &c	772, 000	772, 000	965, 000
Silk hosiery	386, 000	386, 000	386, 000
Silk trimmings (pure and mixed)	2, 895, 000	3, 088, 000	3, 088, 000
Silk ribbons (pure)	1, 351, 000	1, 351, 000	2, 123, 000
Silk ribbons (mixed)	1, 930, 000	1, 544, 000	2, 316, 000
Silk goods of different variety	386, 000	579, 000	386, 000
Total	45, 162, 000	47, 285, 000	58. 093, 000

It is proper to state that the increase in the exports for the past year occurred during the first half; for example, the exports for the first half of 1882 were $32,231,000; those for the second half, $25,862,000.

Now, in the two previous years the heaviest exports occurred in the second half of each year. Had, therefore, the business of the second half of 1882 responded to the usual figues, *i. e.*, the usual business of those seasons, this year would have been an exceedingly favorable one for the French silk industry. Even as it was, it was not as unprofitable as it is generally sought to make it appear.

The imports of silk manufactures (goods of all varieties) for 1882, amounted to $7,913,000; in 1881 they were $9,650,000; in 1880, $8,106,000. The decrease in these imports were in pure silk and mixed silk and cotton tissues.

China and Japan silk.—The consul at Lyons, under date of February 16, 1883, showing the exports of China and Japan silks for 1867 to 1882, says that—

As the manufacturers of the United States employ very considerable quantities of China and Japan silks, it will be interesting to learn the export of this material from those countries extending over a number of years. The largest part of Chinese and Japanese silk is said to be consumed at home, but the Governments of those countries furnish no statistics confirming this assertion. I am, however, inclined to believe that the statement is true. From all the sources (private and otherwise) that I have been able to gather, I think the following table will be found to be reliable as representing the export for the periods named:

Total exports of China and Japan silk from 1867 *to* 1882.

Seasons.	Shanghai.	Canton.	Yokohama.	Totals.
	Bales.	*Bales.*	*Bales.*	*Bales.*
1867-'68	41,275	6,973	12,306	60,554
1868-'69	46,903	11,118	14,966	72,987
1869-'70	42,907	14,455	14,436	71,798
1870-'71	33,634	20,290	8,467	62,391
1871-'72	50,106	20,201	14,635	84,942
1872-'73	56,445	22,386	14,300	93,131
1873-'74	57,389	15,381	14,511	87,731
1874-'75	72,212	15,390	11,941	99,543
1875-'76	70,234	19,414	13,368	103,016
1876-'77	73,275	21,191	21,217	115,683
1877-'78	57,061	16,659	22,024	95,744
1878-'79	64,820	15,685	19,257	99,762
1879-'80	68,818	21,189	17,697	107,704
1880-'81	83,308	11,358	22,339	117,005
1881-'82	52,097	21,066	21,776	94,939

Foreign trade of Japan.—According to Japanese official statistics, transmitted to the Department by Minister Bingham, of Tokei, the foreign trade of Japan was as follows during the month of April of the present year: Exports, 1,760,058 yen; imports, 2,333,807 yen—a balance of trade against the empire of 473,748 yen. The trade during the month of March, according to the same authority, was: Exports, 2,821,301 yen; imports, 2,626,732 yen—a balance in favor of the empire of 194,569 yen.

Distress in the Madeira Islands.—Under date of June 9, 1883, Consul Du Pont-Syle, of Funchal, reports as follows to the Department:

Referring to my report of February 12, 1883, wherein I stated that there was a scarcity of food and failure of crops in Porto Santo, I have now to report that like conditions begin to prevail in this, the principal island of the Madeira group. Rain is generally expected in Madeira during the winter months, and fair settled weather about the 1st of May. This year the order seems to have been reversed. The winter months were dry and clear, while May was very rainy. The consequences have been disastrous. It is anticipated that the potato crop—the chief reliance of the people—will largely fail. Beans will probably share a similar fate. The wine crop will be poor and short. Suffering among the poor already exists.

In the midst of this suffering there is plenty locked up. Ample deposits of corn are held by importing merchants. But so heavy are the import duties exacted by the Government that importers cannot afford to sell except at prices which the poor cannot afford to pay.

So serious is the distress that the civil governor has addressed a letter to his council, asking what measures they advise to meet the emergency. The council has advised:

1. The temporary suspension of import duties on both the corn in bond and that which may arrive.
2. The concession of large credits for public works, in order that the many enforcedly idle may find work.

Should the first measure be adopted, it will doubtless lead to an expansion in the American trade.

P. S.—Since writing the above I learn that the Government has issued a decree by which the corn now in bond, and that which may arrive previous to September 30, is to be admitted free of duty.

French wine harvest of 1882.—Under date of January 12, 1883, Consul Piexotto, of Lyons, supplies the following statistics:

The wine harvest of the consular district of Lyons for the year 1882, including the following departments, produced 4,021,515 hectoliters, representing about 88,473,330 gallons, divided as follows:

	Hectoliters.
Ain	553,600
Ardèche	61,932
Côte-d'Or	568,906

	Hectoliters.
Doubs	43,353
Drôme	63,224
Isère	423,250
Jura	180,134
Haute-Loire	77,623
Nièvre	133,029
Puy-de-Dôme	900,248
Rhône	456,125
Saône-et-Loire	553,968
Savoy	206,126
Total	4,221,515

From 1870 to 1878 the annual harvests averaged 11,880,000 gallons. Among the departments which particularly suffered were those of the Vosges, Charente, Loire-Inférieure, Indre-et-Loire, Loire-et-Cher, Vendée, and Marne, which lost about one-half. Following these came Marne-et-Loire, Vienne, Nièvre, Deux-Sèvres, Côte-d'Or. These deficient results were not entirely due to phylloxera; the temperature exercised a peculiarly bad influence, the weather being generally unfavorable. Notwithstanding this discouraging tableau the wine growers of France, having reconstituted their vines, cherish good hopes for the coming year, of course subject to the conditions of the atmosphere.

The total harvest of France for the year was 679,499,744 gallons. This result was inferior to the harvest of 1881 by 71,551,986 gallons.

CONDITION OF THE CROPS IN EUROPE.

Consul Du Bois, of Aix-la-Chapelle, under date of June 12, 1883, submits the following report on the condition of the crops in Europe:

CROPS IN GERMANY.

For the past six weeks the weather has been very dry, and many of the agricultural districts of Germany are in pressing need of rain. While this drought has not seriously damaged the crops, it has made them all more or less backward. Notwithstanding this backwardness the prospects of a good harvest have not been more encouraging for several years. To the German farmer this is a great relief even though it be a promise that may not be fulfilled.

Years have passed since a good medium harvest, both in quantity, and quality, has been garnered in this land, and the agricultural interests have gradually deteriorated until at present the grain produced is of such inferior quality that it is doubtful if the grain-producing interests of the empire were protected by a higher tariff whether German wheat could compete successfully with American wheat in the first-class markets of the country.

Never before in the history of the past twenty years has the grain price been so low as at present, which is traced to two causes—cheap American wheat, and poor German wheat.

The early part of last winter was mild, and notwithstanding the fact that but little snow fell, and frequent and severe frosts occurred, the seeds developed well. The spring planting was successfully accomplished, which is a boon the German farmer has not enjoyed for six years. Rye has an excellent start, with a good acreage. It stands very high, and is now doing finely under the influence of a warm rain.

In Prussia, especially in East Prussia, the prospects are especially cheering. In some places wheat and rye sown in poor soil were turned under, owing to a meager growth, but the spring planting is now in a prosperous state and bids fair to yield a good average.

In Hanover, rye has been affected by the dry weather, but recent rains have mended in a great measure the injury caused by the drought. Johannis rye is the most hardy this year. In sections where the other rye is backward, and of rather thin growth, this sort is in fine condition, and promises an excellent harvest.

Clover, which was a short time since suffering much injury from the dryness, is now doing well. Oats are exceptionally fine. Vegetables are backward, but are now developing fast. The potato crop has not been in a better condition for years, and the acreage is larger than usual.

Hops are all that could be desired. The acreage is reported as being larger than last year, which fact has already had a visible effect on the market.

The most promising of all agricultural interests at present is the fruit culture. Those interested in the production of wine consider a successful vintage this year as a strong probability, while all other kinds of fruit are in a most flourishing state.

CROPS IN HUNGARY AND RUSSIA.

From Hungary and Russia the reports are, as a rule, favorable. In some sections complaint is heard concerning the backwardness of the cereals. The rains which have now set in may overcome that difficulty, as it was the result of dry weather.

CROPS IN ITALY.

From Italy the reports are satisfactory, especially from Lombardy, where all kinds of vegetables are in an excellent state.

In the province of Venice and throughout the Piedmont district there is universal complaint about the drought, but in spite of this the farmers are expecting a rich harvest.

THE GENERAL OUTLOOK.

But all of these prospects and promises are not at all reliable, because the climate, especially in Germany, is so capricious. Last year in my first report concerning the condition of the crops I reported a most favorable state of things, and observed that nothing could disappoint the high hopes of the German farmer except some great calamity, such as an enduring drought or a cold, rainy season. In a dispatch written in September I was forced, however, to acknowledge that my prediction would not be realized, because one of the calamities which I mentioned had occurred. A rainy season began in July, and the cold, damp summer which followed retarded both the growth and the harvests of the various cereals. While the quantity harvested was greater than it had been for years, the continued dampness and cold had injured the quality to such an extent that, as far as value was concerned, only half a crop was harvested. Thus, while the outlook at present is very promising, still the usual cold, wet season may set in, as it is now threatening to do, in which case the prospects which now promise at least a good average crop will not be realized.

INDEX.

A.

Page.
Adulteration of food, drink, and medicine 105–110
wines and liquors in France 184
Agriculture in India 31–33
in Belgium 122–125
in Hayti 184
Alsace: cotton manufactures in 159–163
American meats in Germany and France 13, 14
American trade in Madagascar 10–13
trade in Tamatave 10
on the southwest coast of Madagascar 11
American products in Java 14–18
vs. Indian wheat 19–24
wheat, how it is imported into France 24–28
plows and fanning mills for India 31–33
pork in France 49, 50
steamships for the Pacific trade 182
America, South; commercial travelers and trade journals in 48, 49
Angora goats 1–10
yield of wool 2
food of 3
climate for 3
profits of breeding 3
mohair, manufacture and export thereof 4
the kids, clipping season, &c 5
cost of 6
transportation of 7
care of 8
particulars of, a sale of 9, 10
Annexation: British, of New Guinea
Artificial coloring of wines 110, 111
Asphalt: trade of Cuba 71–76
Austria and the Boston exhibition 184

B.

Belgium: farming in 122–125
commercial museum of 148
mill wages in 155, 156
Bradford estate in Great Britain 34–47
Brazil: patent law of 114–118
import duty on flour 182
coffee of 182
Trade with Dutch India 18

Page.
British: estates, the Bradford claims 45–47
  silk industry 79
  dwelling accommodation in Glasgow 118–121
  coffee trade 128–132
  annexation of New Guinea 174–176.

C.

Camphor: manufacture of in Japan 97, 98
Canada: tariff changes in 54–56
  how governed 56–58
Canal: St. Petersburg-Cronstadt 148–150
Cattle: in Mexico and the United States 39–45
China: silk of 185
Coffee: the world 125–147
  production of 125
  consumption of 126
  consumption in Europe and the United States 127
  supply to Great Britain 128–130
  re-export of, to other countries 131
  consumption in Europe 131
  consumption of, for last 16 years 132
  export of Jamaica 133
  export of Ceylon 134
  export of British India 135
  imports of the United States 135, 136
    France 136
    Germany 137
    Holland 138
    Belgium 139
    Denmark 140
    Norway 142
    Sweden 142
    Russia 143
    Austria-Hungary 144
    Italy 145
    Switzerland 145
    Portugal 146
  recapitulation of trade in 147
  exports of Brazil 182
Columbia: Manchester print trade of 33, 34
  and its people 111–114
Coloring: artificial, of wines 110, 111
Commerce: of Madagascar 10–13
  of Dutch India 16
  of France 29
  of the River Plate 63–66
  of Geneva 68–70
  of Servia 91–97
  of Samoa 98–101
  of the Pacific 182
Commercial: relations between France and the United States 29–31
  travelers and trade journals in South America 48
  museum of Belgium 148
Cotton manufactures in Alsace 159–163
  goods trade of Penang 169–174

Page.

Cronstadt: St. Petersburg canal 148–149
Crops: silk, for 1883 85–86
  condition of the, in Europe 187
Cuba: asphalt trade of 71–76

D.

Duties in the Madeira Islands 186
Duty. (*See* Tariff.)
Dwelling-house accommodations in Glasgow 118–121

E.

Egyptian finances 183
Emigration from France to the United States 29
Europe: silk consumption of 82, 83
  exports of 84, 85
  condition of crops of 187
Exhibitions: Austria and the Boston 184
Exports: of Angora goats 5
  from Madagascar 11
  to and from Dutch Indies 17, 18
  of New Zealand meat 58–63
  of the River Plate to the United States 63–66
  of Swiss silk ribbons to the United States 66–68
  from Geneva to the United States 68–70
  from Lyons to the United States 70, 71
  of European silk goods 84, 85
  of Servia 93, 96

F.

Farming in France 122–125
Flour: Brazilian import duty on 182
France: consumption of American meats in 13, 14
  how American wheat is imported into 24–28
  commercial relations between the United States and 29–31
  prohibition of American pork in 49, 50
  exports from Lyons to the United States 70, 71
  supply and consumption of silk in 83, 84
  wines, falsification of, in 88
  value of landed property in 121, 122
  adulteration of wines and liquors in 184
  silk trade of, 1882 185
  wine harvest of 186

G.

Geneva. (*See* Switzerland.)
Germany: consumption of American meats in 13, 14
  prohibition of pork in 50–52
  consequential effects of German prohibition of American pork in 52–54
  prices in 102
  tobacco in 184
Glasgow: dwelling-house accommodations in 118–121
Goat, the Angora 1–10

H.

Page.

Hayti, agriculture in 184

I.

Imports: of Madagascar 11, 12
 American goods into Java 14–18
 of France 29
Indian *vs* American wheat 19–24
India: American plows and mills for 31–33
 and the United States 182
Industry: goat breeding of Angora 3–10
 wheat of India 14–24
 woodenware of New Zealand 35–39
 cattle of Mexico 39–45
 meat of New Zealand 58–63
 asphalt of Cuba 71–76
 the world's silk 76–81
 camphor, of Japan 97, 98
 coffee of the world 125–148
 potash of Stassfurt 152–154
Italy: resumption of specie payments in 90–91

J.

Japan: manufacture of camphor in 97, 98
 silks of 185
 foreign trade of 186
Java: American products in 14–18
Journals, trade, in South America 48, 49

L.

Labor. (See Wages.)
Law: patent, of Brazil 114–118
Land: value of, in France 121, 122
Living: cost of, in Alsace 162
 in Germany 102
Lyons: exports from, to the United States 70, 71

M.

Madagascar: American trade in 10–13
Madeira Islands: distress in 186
Manchester: print trade of, in Colombia 33, 34
Manufacture: of camphor in Japan 97, 98
 of cotton in Alsace 159–163
Meats: consumption of American, in Germany and France 13, 14
 export of New Zealand 58–63
Medicine: food and drink, adulteration of 105–110
Mexico: cattle trade with the United States 39–45
Mills: fanning, for India 31–33
 wages in Belgium 155, 156
 statistics of woolen, at Nantes 156–158
Museum: Belgian commercial 148

N.

Nantes. (See France.)
New Guinea: British annexation of 174–176
 the island of 176–181
New Zealand: meat export of 58

P.

Page.
Pacific trade: American steamships for the 182
Penang: cotton goods trade of 169–174
Plows: American, and fanning mill for India 31–33
Pork: American, in France 49, 50
Potash industry of Stassfurt 152–154
Prices of Angora goats 6–9
  wheat, American, Australian, and Indian 23
  Manchester cottons in Colombia 34
  wooden ware in New Zealand 36
  cattle, United States and Mexican 40, 41
  asphalt in Cuba 74
  silk of the world 76–87
  in Germany 102, 103
Prints: Manchester, trade in Colombia 33, 34
Products: American, in Java 14–18
  the silk, of Lyons 86, 87
  of Servia 91–97
  of Samoa 98–101
Prohibition of American pork in France 49, 50
  German 50–52
  consequential effects of 52–54

R.

Railroads of Venezuela 89, 90
Resumption of specie payments in Italy 90, 91
River Plate: exports of the, to the United States 63–66

S.

Samoa: commerce and products of 98–101
  American *vs.* British and German trade in 98
  American shipping and imports at 99
  German predominance on the South Seas 99, 100
  statistics of trade of 101
Servia: foreign commerce of 91–97
  area and population 91
  government 91
  exports from 92
  imports into 93
  trade of, generally 94
  customs receipts 94
  hogs of 94
  special note of consul-general 94
  plum crop of 95
  grain yield of 95
  hide trade of 96
  wine production 96
  import of petroleum 96
    salt 96
  manufactures in 96, 97
  obstacles to business 97
Shipping: charges of St. Nazaire 27
  American, for the Pacific 182

Page.
Silk: exports of Switzerland 66–68
  the world's industry 76–81
  consumption of, in Europe 82–84
    and supply of, in France 83, 84
  European exports of 84, 85
  crop for 1883 .... 85, 86
  production of, in Lyons 86, 87
  trade of, in France in 1882 185
  of China and Japan 185
Singapore: textile trade 163–169
Specie payments: resumption of, in Italy 90, 91
Stassfurt: potash industry of 152–154
Statistics: of Angora goat 7–10
  of trade in Madagascar 10, 11
  of bacon and lard consumption in Antwerp 14
  of trade in Java 16–18
  of wheat trade in India 19–24
  of trade between the United States and France 29–31
  of the woodenware trade of New Zealand 35–39
  of cattle trade, United States and Mexican 40, 41
  of the trade of the River Plate 63–66
  of Swiss silk exports 66–68
  of Samoa 98–101
  of coffee of the world 175–148
  of a woolen mill at Nantes 156–158
  of cotton manufactures in Alsace 156–158
    trade of Penang 170–174
St. Petersburg-Cronstadt Canal 148–151
Switzerland: exports of silk ribbons of, to the United States 66–68
    from Geneva, to the United States 6, 8, 70

T.

Tamatave: trade of 10
Tariff changes in Canada 54–56
Textile trade of Singapore 163–169
Tobacco in Germany 184
Trade, American: in Madagascar 10–13
  at Tamatave 10
  on the southwest coast of Madagascar 11–13
  with Java 14–18
  journals in South America 48, 49
  asphalt of Cuba 71–76
  textile of Singapore 163–169
  cotton goods of Penang 169–174
  of the Pacific; American steamships for the 182
Travelers: American commercial, in South America 48, 49

U.

United States: commercial relations between France and the 29–31
  cattle in the United States and Mexico 39–45
  exports from the River Plate to the 63–66
  exports of Swiss silk ribbon to the 66–68
  exports of Geneva to the 68–70
  exports from Lyons to the 70
  India and the 182

V.

Page.

Values of Angora goat 1–10
  wheat 23
  cotton 34
  woodenware 36
  cattle 40
  exports of Geneva 69
  landed property in France 121, 122
Venezuela: railroads in 89, 90

W.

Wages: mill, of Belgium 155, 156
Wheat: Indian *vs.* American 19–24
  how American is imported into France 24–28
Wine: falsification of French 88
  artificial coloring of 110, 111
  adulteration of, in France 184
  harvest of France, 1882 186
Woodenware: American, in New Zealand 35–39
  German and English 35
  prices of 36
  of New Zealand 36
  American machinery 37
  cost of freight on 38
Wool: yield of the Angora goat ....
Woolen mill at Nantes: statistics of 156–158

UNITED STATES CONSULAR REPORTS.

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

No. 32.—August, 1883.

PUBLISHED BY THE DEPARTMENT OF STATE, ACCORDING TO ACT OF CONGRESS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

CONTENTS.

CONTINENT OF AFRICA.

Page.
American trade in Mauritius..200–202
(Report by Consul Prentis, of Port Louis.)

CONTINENT OF AMERICA.

Trade between Barranquilla and the United States.............................. 195–200
(Report of Consul Dawson.)
Trade of the Bahama Island.. 202–206
(Report of Consul McLain, of Nassau.)
Trade between Port Stanley and St. Thomas, and the United States......... 207–208
(Report by Commercial Agent Carroll.)
Condition of trade in Ontario 209–210
(Report by Commercial Agent Buffington, of Chatham.)
The protective policy of Canada.. 217–219
(Report by Consul Crawford, of Coaticook.)
The Valley of Monterey.. 220–223
(Report by Consul Campbell.)
Colombia and its people 223–226
(Report by Minister Scruggs, of Bogota.)
Patent laws of Mexico.. 266–269
(Report by Consul Sutton, of Matamoros.)
Foreign commerce of Guatemala 269–271
(Report by Consul Titus.)
Mines of Venezuela.. 271–272
(Report by Consul Beach, of Puerto Cabello.)
Mexican exports 272–275
(Report by Minister Morgan.)
The precious metals of Mexico 277, 278
(Report from officials of Mexico through Minister Morgan.)
Settlement of the national debt of Mexico. 292–293
(Report by Minister Morgan.)
Banks and banking in Colombia... 293–295
(Report by Consul Dawson, of Barranquilla.)
Commercial, financial, and political condition of the Argentine Republic.... 295, 296
(Report by Minister Osborn.)
The industrial progress of Canada.. 296–298
(Report by Commercial Agent Robbins, of Ottawa.)
Haytian tariff changes.. 298–300
(Report by Consul Goutier, of Cape Haytien.)
Agricultural progress in the Argentine Republic................................. 309–332
(Report by Consul Baker, of Buenos Ayres.)
Mexico inviting immigration... 332–348
(Report by Minister Morgan.)

CONTINENT OF ASIA.

Page.
American trade in Asia Minor 189-191
(Report of Consul Stevens, of Smyrna.)
Tea trade of Japan 260-266
(Report by Consul Stahel, of Osaka.)
The Seychelles Archipelago 348-353
(Report by Consul Mussey.)

AUSTRALASIA.

Iron and steel trade of New Zealand 280-284
(Report by Consul Griffin, of Auckland.)
New Zealand iron-sand, and American separators 285-287
(Report of Consul Griffin.)
Fidelity guarantee policies in Australia 287-291
(Report by Consul-General Spencer, of Melbourne.)

CONTINENT OF EUROPE.

Our new tariff and British manufactures 191-195
(Report by Consul Dockery, of Leeds.)
American proprietary medicines in Belgium 211, 212
(Report by Consul Tanner, of Liege.)
Foreign commerce of Belgium 213-217
(Report by Consul Steuart, of Antwerp.)
American salted meats in France 219-220
(Translated from La Gironde, by Consul Roosevelt.)
Electric locomotive headlights 226-227
(Report by Consul-General Weaver, of Vienna.)
Shipbuilding in Leith 228
(Report by Consul Leonard.)
Straw goods trade of Italy 228-231
(Report by Consul Welsh, of Florence.)
Spanish law on bottomry bonds 231, 232
(Report by Consul Marston, of Malaga.)
Crops and flour mills of Hungary 232, 233
(Report by Consul Sterne, of Buda-Pesth.)
Cutlery industry of Sheffield 233-239
(Report by Consul Webster.)
Dairy experiments in Denmark 239-251
(Report by Consul Ryder, of Copenhagen.)
Average value of Italian imports and exports 251-260
(Report by Consul Welsh, of Florence.)
The precious metals in France 276
(Report by Minister Morton.)
Mineral and metal industries of France 279, 280
(Report by Consul Peixotto.)
Commerce and products of Greece 300-309
(Report by Consul-General Schuyler.)
Hygienic exhibition in Berlin 353, 354
(Report by Minister Sargent.)
Importation of wines at Bordeaux 354, 355
(Report by Consul Roosevelt.)
The new fishery board of Scotland 355, 356
(Report by Consul Locke, of Leith.)
Italian imports and exports 357
(Report by Consul Duncan, of Naples.)

Page.
Foreign commerce of Portugal 358
(Report by Consul-General Francis, of Lisbon.)
German imports and exports 358-363
(Report by Commercial Agent Smith, of Mayence.)
Increase of Belgian import duties 363, 364
(Report by Consul Wilson, of Brussels.)
Spanish wine in France 364-367
(Report by Consul Rhodes, of Rouen.)
Postal savings banks in Austria 368-374
(Report by Consul-General Weaver, of Vienna.)
Denmark as a grain-producing country 374-376
(Report by Consul Ryder, of Copenhagen.)
Norwegian cod fisheries 376-378
(Report by Vice-Consul Isdahl, of Bergen.)
Olive oil, pure and adulterated 378
(Report by Consul Welsh, of Florence.)
Opening of the Amsterdam Exhibition 379-380
(Report by Consul Eckstein.)
Our new tariff and Italian exports 380-381
(Report by Consul Duncan, of Naples.)
The elective franchise in Holland 381-386
(Report of Consul Eckstein, of Amsterdam.)
Charitable institutions of Florence 386-390
(Report by Consul Webb.)
The adulteration of wines in France 391-392
(Translated from 'La Gironde," by Consul Roosevelt.)
Adulteration of French wines 392-394
(Report by Consul Roosevelt.)
Taxation in Germany 394-408
(Report by Consul Smith, of Mannheim.)

NOTES.

Trade of Japan 409
Manufacture of brandy in Bavaria, 1882 409
American imports into Cape Haytien 409
American products at Havre 410
Crops in Belgium 412
Canadian copper for the United States 412
American and British manufactures in Canada 413
Manufacture and taxation of beer in Bavaria, 1882 413
Population of China 413
Lyons silk trade 413
The European silk harvest 414

CONSULAR REPORTS
ON
COMMERCE, MANUFACTURES, ETC.

NO. 32—AUGUST, 1883.

AMERICAN TRADE IN ASIA MINOR.

REPORT OF CONSUL STEVENS, OF SMYRNA.

COUNTERFEITING AMERICAN TRADE-MARKS.

American domestics, especially the "Cabot," are very popular in this market by reason of their durability, and the demand for them is large. This has led dishonest parties to attach an imitation trade-mark to a much poorer quality of goods, manufactured in England, and to palm them upon merchants from the interior as the genuine "Cabot A." My predecessor, Mr. Duncan, in his report for 1881, called attention to this practice. I regret to say that no diminution has followed, but rather an increase, and closer imitations, with the effect to decrease the demand for the genuine and to impair their reputation. Two specimens of imitation trade-marks, along with the genuine, were recently shown me. A comparison of these with the genuine will expose their dishonesty. On the genuine trade-mark of the Dwight Manufacturing Company appears the American coat of arms, with these words and figures beneath:

DWIGHT.

MAN'G. CO

CABOT

A.

40.

On one counterfeit there is first a line of stars, then an eagle perched upon a Phenician boat (a wretched imitation of our coat of arms, but close enough to deceive the ignorant), with these words and figures beneath:

WHITE

MAN'. CO

CABOT

A

40.

Another imitation contains the figure of a dove, beneath which are these words and figures:

RALLI

BROTHERS

CABOT

A

40.

In justice to the house of Ralli Brothers it should be stated that they consented to have the imitation trade-mark placed upon their English domestics not knowing it was an imitation, and that when they became aware of the fraud, they had the stamp removed. But not all the jobbers in Smyrna are thus honorable, and goods with these counterfeit marks continue to flood the market. Whether the perpetrators of these frauds are manufacturers in England or jobbers here, I am not able to say. Perhaps there is collusion between them. However this may be, detection is not easy; and even if it were, prevention would still be difficult. Just where, if at all, a remedy exists, is not apparent; but a knowledge of the facts will put honorable merchants on their guard, if it does not react upon the guilty parties.

USING AMERICAN PACKAGES FOR RUSSIAN PETROLEUM.

Another fraud on American productions has been recently developed. It consists in filling empty American petroleum cans and cases with Russian petroleum from Baku, inferior in quality, and then putting it upon the interior markets for the genuine article. For some months past agents of the Russian wells have been making strenuous efforts to introduce their petroleum. To this end, they have offered it at prices below the market quotations, and have sought to have it undervalued at the customs. Thus, Russian petroleum imported in barrels is sold at 50 paras per oke (say 13 cents per gallon) and should pay a duty of 8 per cent.; when in cases, it ought to be appraised at from 38 to 40 piasters per case (say $1.65 to $1.76), this being the market price upon which the appraisement is made in collecting the duty of 8 per cent. on American petroleum; and the same rates should be imposed upon the Russian article. But if Russian petroleum is appraised at less than the price for which it is sold (and efforts in this direction have received the sanction, I am told, of the representatives of the Russian Government here) it pays a lower duty than 8 per cent. exacted of American petroleum and is thereby given an unfair advantage.

AMERICAN MACHINERY, IMPLEMENTS, ETC.

American manufactured articles, such as organs, sewing machines, freezers, churns, clocks, watches, agricultural implements, &c., are to be found in this market, but in limited quantity. The son of a former American consul here has established a "Yankee notions" store, selling on consignment, and is slowly introducing the products of American ingenuity and skill. It takes both time and labor to induce this people to purchase and use anything new and out of the usual course, however superior it may be to the old style, and this fact not being comprehended by some American manufacturers has caused them to abandon the field. I have not the slightest doubt but that the annual sale of the above mentioned articles might be increased many fold if the manufacturers were to send out trustworthy agents, and give them time to work the market thoroughly before requiring remittances. The natives are slow and must be given time to be convinced of the utility of new things. But I feel sure that were this region worked with half the push, zeal and enterprise displayed in the development of home trade, the result would prove highly satisfactory. Were American farm labor-saving implements in general use here the increase in the annual productions would be twenty-fold, and the vast tracts of fertile land now running to waste for lack of tillage would be brought under easy cultivation.

QUAY DUES AT SMYRNA.

For a number of years past an obstacle to the development of the commerce of Smyrna, and a source of much annoyance to importers and exporters, has existed in the form of unequal and exorbitant dues exacted by the private company owning the quay and holding from the Turkish Government valuable privileges and concessions in connection therewith. Not only were their tariff rates exorbitant and disproportionate; they were extended beyond even the limit of the concession, causing frequent protests from consuls and merchants, and leading to prolonged diplomatic correspondence. American and English productions suffered most from these inequalities. This state of affairs, I am happy to say, no longer exists. Through the joint efforts of the American and English legations at Constantinople, a new schedule of quay rates has been agreed upon by which an average reduction of from 15 to 25 per cent. is effected, and the inequalities of the old rates in part removed.

W. E. STEVENS,
Consul.

UNITED STATES CONSULATE,
Smyrna, *June* 23, 1883.

OUR NEW TARIFF AND BRITISH MANUFACTURES.

REPORT BY CONSUL DOCKERY, OF LEEDS.

THE WOOLEN-GOODS TRADE OF LEEDS.

From what I have been able to learn I believe the tariff will prove disastrous to the chief industry of my district—the woolen trade. During the agitation which preceded the enactment of this tariff law it was anticipated here that a more liberal schedule of duties would be adopted, and the hopes of manufacturers were accordingly only raised for the moment, as it were, for they now find themselves face to face with little or no demand for their wares, and the complaints in consequence increase daily. It was for a little while thought that light woolen goods of a low class would benefit materially by the new arrangement, but on a strict analysis even this expectation is evidently not to be realized. And it is a matter of congratulation, not only to the framers of the tariff, who displayed so much wisdom, but also to American artisans and the American people generally, that there should be left no loophole through which any class of woolen goods can enter fraudulently. I am led thus to speak, because I have had complaints preferred against the change in the tariff which makes woolens liable to an ad valorem duty and also a varying specific duty per pound weight according to the value per yard. While, as a matter of course, there is here objection to any and every sort of duty levied by any other nation than Great Britain, still merchants and manufacturers in a large way of business could, with a considerable amount of explanation, understand a simple ad valorem and specific duty imposed by a foreign nation; yet it passes their understanding that a foreign country should impose a duty of 35 per cent. ad valorem and also a specific duty of 35 cents per pound on cloth valued at less than 80 cents per yard, and yet a higher ad valorem duty on cloth worth above 80 cents per pound. Reputable shippers profess not to understand so complicated a schedule of duties, and I have been importuned to explain it and the effect it will have on certain kinds of cloth; but naturally I have said if persons in the trade do not understand it I cannot be reasonably expected to enlighten them, although I have gone so far as to intimate to one firm which pressed for an answer that I supposed it was the intention of the framers of the law to leave no room for fraudulent practices. From my knowledge of the trade here, its exigencies and straits, it is well that so much forethought was displayed. Indeed, the gratitude of every laborer, artisan, and capitalist connected in any manner with the woolen industry of the United States, as also of the nation at large, on account of the protection to revenue, is due to those who had the wisdom to frame the tariff on woolens. Thus far there is a considerable falling off in the export of woolens from this consular district to the United States; and as this has not been caused by the tariff change which only comes into effect on the 1st of next month, there is every reason to believe that the shipments will continue to decrease, and that by the end of the current year I shall be able to show a very serious falling off in the total amount of exports to the United States.

The woolen trade of the district is in a very depressed condition. It has been so for a long while. There is no money to be made in it now, nor has any been made for the past ten years. If one asks how is it they have gone on so long, and are still standing up against adversity, I have only to answer that it is, when once fairly started here, just about as easy to run an insolvent business and live ostentatiously (a requisite) out of it for many years, as it is to carry on a perfectly sound business. Of course, if the happy, lucky moment of prosperity does not come, eventually the crisis does, and down goes business with heavy liabilities, and only assets enough left to pay for a few letters written by solicitors and the other expenses of the accountant or solicitor who undertakes to bury the affair out of reach of the creditors. I am told nearly every day by respectable men as to the condition of the woolen trade. I was told this day as to the serious state of affairs at Dewsbury, where the mills used to run half their time to supply the American demand alone, subsequently for the continental trade, but are now reduced to unprofitable competition with others in the home trade, with the lowest scale of living wages, and consequently work people leaving in large numbers for America and Canada, loss of money to owners, warehouses unlet, and property decreasing in value at an alarming rate. Some capitalists have also recently gone from there to the United States to start in the manufacture of woolen goods. The tariff of first one country and then another having been raised has produced this unwholesome effect upon the woolen trade which formerly had a hold in Germany, Austria, Spain, France, and Italy, whereas now there is a very poor trade with those countries. Still the shippers manage to keep going on, losing money for a long while, and of course much of the money lost is not their own. Only a few days ago a cloth firm in Leeds suspended, and I have now heard that they attribute their suspension to the change in the Italian tariff, which occurred about eight years ago. In fact 25 cents in the dollar is reckoned a pretty fair dividend now to creditors, unless they should be able to wind up the estate without the aid of a solicitor. But it is not only in the cloth trade that failures take place where the parties have been bankrupt for years. A little while ago a large oil merchant in Yorkshire failed, who had been bankrupt for several years, but still kept going on and living at the rate of thousands a year, expecting the millennium of particular if not universal prosperity.

Under this awful stagnancy there exists a tendency to become belligerent, for, with all the social and other attractions, the one great ideal of every Englishman is *trade*. If he cannot trade he will not be happy. I do not speak of trade in a narrow sense, for no one looks with so much scorn upon people engaged in trade as those Englishmen do whose fathers made their fortunes in it, or even those who themselves have done so and quitted it; but I refer to trade in its wider sense, that of coaxing big nations into free-trade ideas, conquering insignificant tribes, annexing cannibal islands and parts of uncivilized continents, and furnishing all with a governor and body guard and a few dozen Manchester merchants; the latter, of course, clothe the savages with a string of beads and an iron ankle-band, and perhaps a strip of cotton cloth, but when they have realized their thousand per cent. several times they come back to England to spend their wealth.

This belligerent interest is marshaled by those otherwise not very puissant bodies, the Chambers of Commerce, whose not famous achievements so much as their extravagant conceits are enough to alarm all the clannish trades from engineer to tanner, thereby causing such action as to disturb distant nations. Egypt has been subjected, after a most fearful though painless struggle, beginning with a second Trafalgar and ending with another Waterloo, to the dominion of Manchester.

Now, apparently, New Guinea, in order, of course, that grievances should be redressed, injuries removed, abuses corrected, and free trade established, is to be annexed to England, and Manchester is to have the first turn at supplying the aborigines of that big country with girdle cloths. The commercial progress of the United States in Mexico, as well as the French expedition to Tonquin and the bombardment of a mud fort in Madagascar, is at the same time viewed with great concern by the commercial chambers in England.

THE FLAX AND LINEN TRADE.

The flax trade of this district will also be adversely affected by the new tariff. A large Leeds manufacturer of linen yarns told me a few days ago that he had made his last shipment to the United States, because the framers of the new tariff, in affecting to lower the duty, had really increased it, at least so far as his wares were concerned, to such an extent as to stop further shipments. The usual price of the yarns shipped by said firm is sixpence per pound, and the duty in the old tariff was 33⅓ per cent., whereas in the new tariff it is 40 per cent. ad valorem. Therefore the increase in the duty amounts at the foregoing valuation to 1 cent per pound, and when it is known that this additional cent stops exportation, it will be seen what a small margin has hitherto been available for profit in this trade. I am told that should makers be enabled through any cause to turn out linen yarns at say *5d.* per pound, they would then again ship their goods to the United States. This seems to me to have some bearing upon free trade, which was a debatable subject nearly forty years ago, but it is needless to pursue it now further than to remark that the only apparent way in which the manufacturer is to again combat the American tariff is to reduce the price of his ware. Of course such reduction means less wages, working on small and therefore dangerous margins, and with cheap money. It is obvious the scale of wages cannot be reduced; the raw material is already very cheap; all waste is put to the very best use, and the very fact of working on small margins would cause money to become dear for the purpose of such industries. Therefore, I do not expect to see a revival in the exportation of linen. I am given to understand that the flax and linen trade generally has been in a very unsatisfactory condition for several years, and that parties so engaged would gladly get out if it were possible to do so without incurring very serious losses in realizing upon plant, &c. As an illustration of this, I may say that the machinery of a large Leeds flax spinning concern was sold by auction for only £7,000, while it was valued in the company's books for insurance purposes at £50,000.

The manufacture of linen cloths is regarded as the best part of the flax industry, but even this is anything but a remunerative business at present.

Of patent linen threads, &c., I have to say that while the exportation of the same to the United States continues to be on as large a scale as formerly, the trade has undergone such a radical change since my arrival here, six years ago, in the shape of increased discounts and an almost total cessation of absolute sales by the substitution of consignments, that I do not feel justified in speaking here at all of such a peculiarly conditioned trade. Regarding this change, however, I expect in the course of a few days to make a special report to the Department.

THE IRON INDUSTRY OF LEEDS.

The iron industry of Leeds will not be affected to any appreciable extent either way by the new tariff. This industry appears to be in a healthy state, and while it may not be in a particularly flourishing condition, yet it is recognized as composed of sounder elements than most other industries.

TANNERS, BREWERS, AND BUTCHERS.

I understand the tanners of this district have been doing a very bad business for a year or so; in fact, losing much of the money they so suddenly found themselves possessed of a few years ago when their trade was so good. This state of affairs regarding tanners somewhat surprises me, because of their close affinity to brewers and butchers, who I am sure are still doing a thriving business. The former class are, what with brewing beer, owning or otherwise controlling many public dram-shops, peddling tobacco, cigars, snuff, &c., fast becoming an influential quantity politically in England, besides amassing for themselves extensive fortunes and an illimitable audacity, while the latter possess full as much egotism, somewhat less education, but thorough honesty, cept regarding American beef, which they will not sell at all as such.

THE LIMITED-LIABILITY ACT.

The limited-liability act has militated against honest trade in England and done very serious injury thereto by placing in the hands of a few men, known as directors, who are chiefly concerned in drawing their salaries, the power to wreck by hazardous enterprise businesses hitherto perfectly sound. The directors, in the keen competition which exists in all branches of commerce, not only frequently bring their own companies to grief, but, unfortunately, other more honest traders whose liabilities are not limited to the capital employed. Directors have a comparatively easy task to perform, that of drawing their salaries and paying dividends, which latter operation may be done for some years out of capital without arousing from their sluggish sleep credulous shareholders; but, alas, the dismal day of reckoning does eventually arrive, and although the directors ascribe the calamity to bad trade, &c., and they escape scot-free, their position is envied by no honest person.

A. V. DOCKERY,
Consul.

UNITED STATES CONSULATE,
Leeds, *June* 19, 1883.

TRADE BETWEEN BARRANQUILLA AND THE UNITED STATES.

REPORT BY CONSUL DAWSON.

I have the honor to state that Barranquilla is the chief city of commercial importance within the United States of Colombia, and is the residence of many of the principal merchants of the Republic. It is a growing city, and, from a few houses twenty years ago, it now has a population of upwards of 25,000. Situated as it is, so near the outlet of the great Magdalena River, it is destined to increase in size and commerce, and become to Colombia what New York is to the United States, the great commercial emporium of the Republic, Colon and Panama, free ports, being more a highway of nations than a part of this country. To this end Barranquilla has many things in its favor. The custom-house is located here. All the river steamers and sailing vessels on the Magdalena, conveying from the vast back-lying interior to the coast the multitudinous products of the country, start from and return to this place. The imports from foreign countries come here to be conveyed up the Magdalena to the population of the interior. This, also, is a comparatively healthy city. The people look healthful, and show as much vital energy and activity as are often seen in a much cooler climate. From November to April there is a prevailing breeze, which modifies the heat and makes this a not uncomfortable place of residence.

AMERICAN STEAMSHIPS WANTED.

In a word, Barranquilla is just now one of the most important places whose trade the United States ought to secure, and the way to do this is for some of our enterprising citizens to start a line of steamers to run direct between this port and New York. The steamers should not be of more than ten or twelve hundred tons register, and should not draw more than fourteen feet of water on account of the bar at the entrance to the river. Such a line should at first make monthly trips, and thereafter run more frequently according to the demands of trade. There are merchants in this city ready to come forward and almost guarantee a monthly cargo to a regular line of steamers. And I heard one gentleman say to-day that he could secure a cargo both ways. Within sixteen days after my arrival here, at three shipments made by such conveyances as came along, I certified one hundred and two invoices at an estimated value in United States gold coin of $182,428.34, since which time, April 6, there has been nothing here to take any cargo to New York, and it has been accumulating for whatever may come along bound for that port.

It may be said *en passant* that an effort has been made the past two years by a certain steamship line to divert commerce from this port by means of a dique or excavated water way between Carthagena and Calamar, a place on the Magdalena over ninety miles from Carthagena. Thus far the enterprise has been a failure, and, so far as I can ascertain from the best informed merchants here, it is about as likely to be successful as would be an enterprise to turn back the waters of the Magdalena into the mountains. I may say further that it is projected to extend the present railway here three miles farther, from Salgar to Puerta Bolio, in which case ships of the greatest draught can discharge and take in cargo alongside the wharf, but eighteen miles from this city.

EXPORTS OF BARRANQUILLA.

The principal exports are hides, coffee, quinia, fustic, india-rubber, balsam, and limited quantities of cigars, tobacco, goatskins, minerals, plants, &c., as may be seen by referring to the subjoined table, marked A. And if some enterprising firm would come here from the United States and take hold of the alligator business, a thriving trade might be carried on in the hide and oil of that creature, which abounds along the Magdalena. A friend of mine alleges that he has seen the alligators lying along the sandy shore so thick that he could have stepped from the back of one to another for a distance of two miles.

IMPORTS FROM THE UNITED STATES.

The principal imports from the United States, mostly from New York, are flour, kerosene oil, lard, and provisions, such as salt beef, canned meats and fruits, hams, matches, lumber, timber, shingles, tar, pitch, rosin, rope, fine hardware, such as knives, scissors, &c., and clocks, but not watches. The imports in dry-goods amount to almost absolutely nothing. Boots and shoes either come from Europe or are manufactured here.

PRICES OF IMPORTED ARTICLES.

The prices of things here are extravagantly high, canned meats retailing at $1 a tin, and other things in like proportion. Beer wholesales at $8 per case, containing three dozens of half bottles, or at the rate of 37½ cents per bottle, United States currency, or for nearly double what it sells for at whosesale in far-away Samoa, or for six times what it costs in Washington. Wines worth 75 cents per bottle in France sell for double that amount here. The subjoined extract from the Shipping List, marked B, will give some idea of the prevailing prices; but it must always be borne in mind that these prices are in Colombian money, which, according to the standard established by the United States Government, is worth but 82.3 cents on the dollar. The money principally in use, however, is worth much less. Flour, therefore, rated at $20 per barrel is really selling at $16.46 per barrel, United States coin, or less, but at about two and one-third times as much as in the United States; and the rate of exchange between here and New York is 25 and 27 per cent. In regard to the flour traffic see the subjoined extract C. For a full exhibit of the values of the imports and exports at this port last year see Table D. For the navigation of the port see Table E. For some valuable information about the country see Table F.

THOMAS M. DAWSON,
Consul.

UNITED STATES CONSULATE,
Barranquilla, April 16, 1883.

A.—*Articles exported through the custom-house at Barranquilla from January* 1 *to December* 31, 1882.

Articles.	Packages.	Pounds.	Values.
Indigo	99	17, 574	$6, 880 28
White rum	1	52	16 46
Linseed oil	12	1, 349	526 72
Starch	3	392	26 34
Cotton	2, 011	402, 036	26, 797 33
Cattle horns	243	26, 426	999 94
Anotto	2	261	49 38
Kerosene oil	13	1, 697	106 99
Balsam	546	71, 840	27, 183 69
Coffee	89, 370	11, 570, 674	1, 959, 431 32
Hides	250, 324	5, 444, 547	823, 500 38
Turtles	1	65	82 30
India rubber	929	121, 256	40, 351 69
Cigars	56	5, 233	4, 047 51
Cacao for chocolate	463	59, 334	12, 818 23
Salt beef	52	7, 178	452 65
Curiosities	1	26	6 58
Cigarettes	1	65	41 15
Dividivi (dye-stuff)	1, 924	251, 115	5, 252 39
Sweets, guava	2	76	57 61
Drugs and medicines	14	1, 827	345 66
Emeralds	5	....	7, 611 93
Luggage	39	1, 968	3, 316 69
Mats	72	7, 171	1, 111 87
Muskets	1	22	20 58
Monuments	1	87	82 30
Hide cuts	5	196	32 92
Cattle	4, 581	....	130, 824 08
Logwood	40, 281	7, 636, 007	50, 588 99
Gloves	1	33	49 38
Bones	80	8, 313	197 52
Musical instruments	2	72	45 27
Printed matter	1	115	98 76
Vegetable wool	2	261	98 76
Pottery	1	54	16 46
Printed books	30	2, 654	625 48
Liquors	10	827	82 30
Fustic	30, 470	2, 957, 815	18, 792 55
Samples	5	231	32 92
Machinery	1	130	16 46
Merchandise	41	5, 492	1, 423 79
Minerals	6, 468	843, 944	185, 800 48
Cedar	182	59, 378	1, 481 40
Gold and silver	193	....	238, 778 68
Gold and silver bars	1, 934	....	2, 536, 283 91
Goat skins, &c	251	31, 445	6, 156 86
Stuffed birds	42	3, 676	7, 325 52
Orchids	1, 972	229, 658	82, 876 10
Machinery, pieces	1	131	82 30
Cut tobacco	23	8, 804	2, 016 35
Quinia bark	95, 481	12, 690, 864	4, 494, 452 38
Cheese, barrels	29	4, 024	459 23
Rice fiber	1	174	32 92
Railway rails	2, 420	824, 325	9, 357 51
Rum	2	87	16 46
Straw hats	89	13, 020	74, 870 98
Cotton seeds	5, 451	790, 791	3, 664 00
Empty bags	6	626	49 38
Tobacco	9, 621	1, 364, 943	117, 160 63
Ivory nuts	6, 945	920, 297	23, 435 75
Military costumes	1	131	83 20
Sundries	59	5, 938	1, 574 40
Vanila beans	3	228	90 53
Claret	66	9, 048	1, 333 26
Sarsaparilla	70	9, 005	3, 110 94
Totals	**553, 006**	**46, 415, 008**	**10, 974, 535 88**

B.—*Extracts from the shipping list, February,* 1883.

It is something remarkable, that while every export which Colombia sends to the United States enters *duty free,* every article which the United States sends to Colombia in return, excepting corn, rice, green vegetables, and lumber, is graded at onerous rates.

* * * * * * *

Let us take, for instance, flour, grain, salt meats, fish, kerosene, &c.—absolute necessities—and see the result. To-day, flour pays a national duty of $5 per barrel, to which is added a state duty of $3. Under these circumstances, flour costing in New York or New Orleans $7 per barrel, sells here for $20. Kerosene oil pays a duty of 20 cents per kilogram gross weight. It costs, more or less, in the United States, 10 cents per gallon, while here, we burn our lamps to the tune of $1.20. In Colon and Panama, free ports, it sells at $2.80 per case, or 28 cents per gallon. Salt beef, pork, and fish are beyond the reach of the poor; *e. g.*, a barrel of beef weighing 200 pounds, costing in New York $18, pays a duty on gross weight of 5 cents per kilogram, *i. e.*, $5, which with other expenses makes it sell here more or less at $30. No protection interests would be injured by a reduction of duties on these articles, for, save in the far interior, no wheat is grown, and while petroleum exists near us, in the higher country, none is produced.

* * * * * * *

During the plague of the locusts, the government remitted the duty on salt, flour, lard, sugar, salt meats, &c., but has now resumed it, although the corn and rice fields have not yet recuperated from the devastation, and thousands of people are in absolute poverty. And this touches our very tables. Owing to the high price of corn, the raising of poultry has almost ceased to exist. Chickens and turkeys, which a few years ago went "begging" at 40 and 80 cents, respectively, now range from 70 cents to $2, and frequently cannot be had in the market at those prices. Eggs, like those in the "magician's show," have become "invisible."

D.—*Imports at Barranquilla from January* 1 *to December* 31, 1882.

Countries.	Packages.	Pounds.	Values.
United States	208, 066	19, 745, 129	$1, 201, 090 36
England	98, 258	15, 489, 978	3, 087, 789 17
France	51, 072	5, 889, 369	1, 842, 549 63
Germany	36, 368	2, 943, 053	632, 378 57
West Indies	17, 970	2, 347, 786	129, 166 31
Colombia	647	65, 404	117, 290 50
Spain	11, 281	1, 145, 383	86, 701 90
Venezuela	11, 536	1, 630, 437	24, 984 39
Italy	65	5, 429	857 56
Totals	435, 263	49, 261, 968	7, 072, 752 78

Destination of exports from Barranquilla from January 1 *to December* 31, 1882.

Countries.	Packages.	Pounds.	Values.
United States	334, 682	16, 825, 028	$2, 794, 015 69
England	99, 634	12. 766. 258	5, 560, 027 68
France	32, 904	4, 062, 182	1, 671, 285 24
Germany	35, 615	3, 910, 983	575, 281 33
West Indies	42, 842	7, 064, 739	324, [illegible] 77
Colombia	7, 236	1, 769, 471	43, 661 19
Spain	45	4, 383	3, 259 66
Venezuela	26	9, 218	2, 222 10
Italy	20	2, 610	349 29
Peru	2	196	148 14
Totals	553, 006	46. 415, 068	10, 974, 585 88

Flags under which the exports were moved from Barranquilla from January 1 *to December* 31, 1882.

Countries.	Packages.	Pounds.	Values.
United States	16, 803	2, 240, 642	$97, 586 57
English	426, 878	33, 467, 697	6, 923, 931 84
German	70, 107	5, 862, 064	1, 312, 561 30
French	21, 322	2, 429, 277	2, 477, 851 98
Spanish	15, 196	1, 982, 752	148, 563 32
Colombian	600	15, 036	11, 045 15
Danish	2, 100	417, 600	2, 995 72
Totals	553, 006	46, 415, 068	10, 974, 535 88

E.—Statement showing the navigation at the port of Barranquilla for the year ending December 31, 1882.

Flag.	From—	Entered.					
		Steamers.		Sailing-vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
United States		7	5, 571	33	6, 953	40	12, 524
English		117	154, 966	25	6, 733	142	161, 699
German		34	41, 392			34	41, 392
Spanish		47	61, 583	5	854	52	62, 437
French		53	101, 602	2	472	55	102, 074
Danish				2	282	2	282
Netherlands				3	223	3	223
Colombian				15	1, 504	15	1, 504
Venezuela				17	1, 264	17	1, 264
Italian		2	1, 084			2	1, 084
Norwegian							
Total		260	366, 198	102	18, 285	362	384, 483
	West Indies	32	37, 913	53	8, 969	85	46, 882
	Spain	1	1, 164			1	1, 164
	Colombia	77	115, 037	14	2, 624	91	117, 661
	France	29	54, 195	1	250	30	54, 445
	Germany	24	31, 747			24	31, 747
	The United States	38	40, 296	18	3, 809	56	44, 105
	Venezuela	2	1, 705	11	805	13	2, 510
	England	57	84, 141	5	1, 828	62	85, 969

Flag.	To—	Cleared.					
		Steamers.		Sailing-vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
United States		6	5, 325	35	7, 236	41	12, 561
English		119	156, 555	24	6, 645	143	163, 200
German		33	42, 889			33	42, 889
Spanish		47	60, 552	6	1, 026	53	61, 578
French		54	103, 347	2	472	56	103, 819
Danish				2	282	2	282
Netherlands				3	223	3	223
Colombian				12	1, 150	12	1, 150
Venezuela				18	1, 312	18	1, 312
Italian		2	1, 084			2	1, 084
Norwegian				1	262	1	262
Total		261	369, 752	103	18, 608	364	388, 360
	West Indies	17	19, 325	53	9, 249	364	28, 574
	Spain						
	Colombia	127	180, 302	43	8, 539	170	188, 841
	France	28	51, 756			28	51, 756
	Germany	25	33, 244			25	33, 244
	The United States	29	30, 268	2	228	31	30, 496
	Venezuela	1	1, 250	2	90	3	1, 340
	England	34	53, 607	3	502	37	54, 109

F.—HISTORY, GOVERNMENT, &c., OF COLOMBIA.

[Extract from the Shipping List.]

The United States of Colombia was formerly a province of Spain, from which, with Venezuela and Ecuador, it achieved its independence in 1821. A confederation was formed between these three provinces, under the name of Colombia. It lasted only until 1830, when it was dissolved, this country taking the name of New Granada. In 1860, under President Mosquera, it was changed to its present name.

The city of Bogota is the capital of the nation, as of the State of Cundinamarca. It is situated 4° 36′ 06″ north latitude, longitude 74° 13′ 59″ west, with a temperature from 13° to 15° centigrade, and is 8,600 feet above the level of the sea. Its climate is delightful, its plains fertile, and abounds in an infinite variety of flowers and fruits at all seasons of the year.

The form of government of Colombia is to a great extent modeled after that of the United States, and consists of a legislative body, divided into two houses; one of senators elected by the States, each of which is entitled to three; the other of representatives, elected by the people and apportioned one to every 50,000 souls; of one president, charged with executive power, elected by the States every two years; of one supreme court composed of five ministers, elected by the assemblies of the States for the term of four years.

Conforming to the theory of the Federal Constitution, the States are sovereign, or to say, have ample power to govern themselves; but joined in maintaining foreign relations and in branches of material progress. The Government of the Union does not exceed the functions delegated to it by the States.

The system of universal suffrage exists. Slavery was abolished by gradual emancipation, the last slave becoming free in 1849. There is no recognized religion; all sects are tolerated and respected. Capital punishment does not exist, the limit of punishment for any crime being ten years' imprisonment.

The French decimal system of weights, measures, and money has been adopted by the Government of Colombia. Local weights and measures are sometimes used; the most common being the *carga*, 250 pounds*; the *arroba*, 25 pounds; the *fanega* of salt, 18 *arrobas*, or 450 pounds; *fanega* of corn, 1,000 ears. The *rara* equals 32¾ inches. In money, the gold coins are the double *condor* ($20), *condor* ($10), half-*condor* ($5), and two and one dollar pieces. The silver coins are dollars, half-dollars, twenty, ten, and five cent pieces. A nickel *cuartillo* has been issued by the Government, as also a *mitad*, but this latter is almost entirely out of circulation. The dollar is called in local phraseology "hard" or soft; the former being of *ten* dimes and the latter of *eight*. The terms 10-10ths and 8-10ths are also used. The Government only recognizes the dollar of 10-10ths. The *real*, or dime, is halved into *medios;* half of a *medio* is a *cuartillo;* half a *cuartillo*, a *mitad*.

The waters of the rivers are entirely free to commerce, and there are at present seventeen steamers navigating the Magdalena.

Colombia entered into the Postal Union in 1882.

The standing army of Colombia, or National Guard, numbers about 3,000 men.

The State of Bolivia lies on the Atlantic coast between the States of Panama and Magdalena. It contains 6,840 square miles and a population of about 217,000.

Its ports of entry are Carthagena and Sabanilla. The former is the capital of the State. The latter is embraced within the boundaries of the city of Barranquilla, the capital of the province of Barranquilla, which is composed of the following districts: Barranquilla, Soledad, Malambo, Sabanagrande, Santo Thomas, Palmar de Varela, Galapa, and Tubará.

AMERICAN TRADE IN MAURITIUS.

REPORT BY CONSUL PRENTIS, OF PORT LOUIS.

Since writing my last report, I have to note the arrival of a vessel from Boston with a general cargo, the first one for many years. This cargo was imported by the firm of Messrs. Alexander Duff & Co., one of the most substantial houses of this place. I should also mention that this same enterprising firm are continually receiving American goods via England, which arrive here from the latter country by sailing-vessels and steamers, and I am pleased to note that business by this route is steadily increasing.

---

*Steamer freights up the Magdalena, are calculated by *cargas*. Persons designing to make journeys to the interior, beyond water communication, should put their effects in packages of not more than 125 pounds each, suitable for mule transportation.

Mr. T. P. Robinson, a native of Boston, and the only American doing business here, is connected with this firm and has special charge of this branch of their trade. And I will here mention, for the guidance of all exporters who may wish to extend their foreign trade to this market, that any business confided to these gentlemen will be in safe hands and receive careful attention.

The cargo referred to above consisted principally of shingles, lumber, flour, pitch, tar, turpentine, petroleum, fish, and fertilizers.

This market of late years has been supplied with pine lumber from Sweden either coming direct or via England or France, and consists of planks 3 inches thick, some being received whole, others with one cut (not quite to the end), making two boards of about an inch and a half in thickness; others with two cuts, making three boards of about 1 inch; others with three or four cuts.

These planks are very evenly cut in Europe, and importers, believing that boards could be sawed equally well in America, ordered lumber from there to be cut in a similar way to suit this market; but I was much astonished at the shameful manner in which the work was done there, considering the perfection which we claim for our wood-working machinery.

Attempts have been made to import American flour and wheat into this island, but without much success, as it appears it is not prepared properly to stand a long sea voyage, as the same products from other countries are, or at least this is the opinion of Mauritius dealers, based upon their experience. They say that the American wheat which has been sent here has not been sufficiently dried before shipment, and they suggest a similar reason for the musty condition in which American flour often arrives, *i. e.*, that the wheat from which it was made was not sufficiently dry. It is reported that a similar difficulty has been experienced in the neighboring island of Reunion.

Petroleum continues to be a staple article of import and I have to note the arrival of two lots recently, aggregating 9,000 cases. The consumption amounts to about 18,000 cases per year, and has almost entirely taken the place of the cocoanut oil, which is made extensively in the adjacent islands, and which was formerly universally used for illuminating purposes.

Through the enterprise of the gentlemen before mentioned, many other American manufactures have been imported and are gaining ground here, competing successfully with those from other countries, viz: tobacco, Fairbank's scales—which are standard in this island—woven-wire mattresses, White's sewing machines, lawn mowers, locks, imitation leather, filters, chairs, clocks, canned goods, asbestos goods, harness, files, &c.

I think that many more articles might be taken by this market if brought to the notice of importers by the traveling agents of our manufacturers, who should, of course, be prepared to show samples of their goods.

The agent of Messrs Fairbanks & Co., who recently visited this island for the purpose of introducing more extensively among the planters machines for weighing their canes, was particularly well received, and as their manufactures are already well known here, it is probable that an increased business will result in this particular kind of scale, as without doubt all estates that buy canes will adopt the system of buying by weight, and many planters have acknowledged the importance of weighing canes before they are crushed on estates which use only their own canes.

THOMAS J. PRENTIS,
United States Consul.

UNITED STATES CONSULATE,
Port Louis, Mauritius, March 30, 1883.

TRADE OF THE BAHAMA ISLANDS.

REPORT BY CONSUL M'LAIN, OF NASSAU.

The report on the commerce and navigation of the Bahamas for the year ended December 31, 1882, shows a satisfactory increase in the volume of trade of this colony, both in a general way and especially with the United States, as will appear from the subjoined statements:

GENERAL TRADE.

Total imports for 1882	$1,016,827 44
Total imports for 1881	811,582 64
Increase	205,244 80
Total exports for 1882	760,336 77
Total exports for 1881	556,910 15
Increase	203,426 62

It is well understood, however, by those who are acquainted with the peculiar condition of trade in this colony that this large increase is not altogether due to the legitimate operations of trade, but that it arises in part from the fact that into these gross amounts of exports and imports enter a large portion of the cargoes of vessels which have been wrecked in these waters, or which, meeting a stress of weather, have sought Nassau as a port of safety and for repairs. The value of goods brought into the colony during 1882 by wrecks and distressed vessels was in round numbers $188,000, all of which appears in the returns as imports. Of this sum about $50,000 worth was sold here, leaving a balance of, say, $138,000, which was forwarded to its original destination, and which appears as exports, being made up as follows, viz, coffee, $38,000; unrefined sugar, $83,000; sundries, $17,000. After these deductions have been made, however, there still remains enough surplus to show a fair increase of legitimate business during the year.

Imports.—There has been a falling off in the importations of apples, brandy, beans, live cattle, metal, corn, corn meal and hominy, ice, petroleum, and tea. A moderate increase is noted in the importations of all liquors, except brandy, in biscuit and bread, candles, cheese, cigars, coffee, dried and pickled fish, lumber, lard, salted meats, nails, rice, shingles, and tobacco. The increase in woolen goods, cottons, silks, linens, hardware, and such goods paying an ad valorem duty of 20 per cent. has been quite marked, amounting to $140,000, or about seven-tenths of the total increase of imports.

Exports.—In these we find an increase in coral, cocoa nuts, old metal, pineapples, tomatoes, preserved fruits, guano or cave earth, rawhides, shells, sponges, and sarsaparilla bark. We note a decrease in lumber, oranges, salt, specie, turtle shell, and woods. The increase in sponge, pineapples, and preserved fruits is quite large. A considerable quantity of cotton was exported to England, the production being gradually on the increase.

TRADE WITH THE UNITED STATES.

The condition of trade between this colony and the United States which, as mentioned in my former reports, has been very gratifying for several years past, shows a steady and healthy increase during the year just closed, the United States furnishing about 65 per cent. of the legitimate imports and receiving in return about the same proportion of colonial exports:

Imports from the United States in 1882	$554,249 62
Imports from the United States in 1881	523,147 34
Increase	31,102 28
Exports to the United States in 1882	578,662 16
Exports to the United States in 1881	401,092 46
Increase	177,569 70

The above increase in importations from the United States is in the way of legitimate trade. The large increase in exports, however, is in part to be attributed to the fact that goods from wrecks and vessels in distress, which came into the colony from West Indian ports, were forwarded to their original destination in the United States, amounting in value to $131,000, divided as follows, viz, coffee, $38,000; sugar, $83,000; sundries, $17,000. Deducting this item, we still have an increase in exports to the United States of about $46,000.

Imports.—There was an increase in importations from the United States in bread and biscuit, butter, candles, salted fish, gin, whisky, hay, lard, lumber, salted meat, nails, oats and bran, rice, shingles, specie, refined sugar, tobacco, wines, woolen goods, silks, cottons, linens, and hardware.

The amount of rice consumed by the natives has largely increased, the importations from the United States for 1882 being 470,000 pounds as against 340,000 pounds in 1881; and from Great Britain 650,000 pounds as against 505,000 pounds in 1881, the increase of 275,000 pounds being about equally divided between the two countries. The quantity of woolen goods, silks, cottons, linens, hardware, and such goods, paying an ad valorem duty of 20 per cent., brought from the United States, is steadily increasing, as is shown by the fact that the value of these goods imported from the United States in 1882 is $153,913 as against $123,321 in 1881. These goods have obtained a firm footing in the colony, which they will undoubtedly maintain. Two years ago it was almost impossible to obtain American whisky in this market, Scotch and Irish being exclusively sold. It has lately been introduced by two firms, and an increasing demand is already noticed. Jamaica rum and Holland gin are the liquors mainly consumed by the black population. An effort was made to introduce American malt liquors, but the fact that the importations in 1882 are 50 per cent. less than in 1881 shows that the tropical Englishman is slow to forego his liking for Bass ale and London porter. Beans, pease, live cattle, cheese, ice, petroleum, unrefined sugar, and tea show a slight falling off.

The decrease in raw sugar is accounted for by the fact that native sugar is being made in increasing quantities, the mills, vats, and plant generally all being imported from the United States. I am informed, however, by a large manufacturer of sugar that unrefined sugar can be made in Cuba, carried to the United States, and exported thence to the Bahamas, in bond, and landed here almost as cheaply as the native sugar can be manufactured in these islands, thus leaving so small a margin of profit that it scarcely pays to establish sugar-mills in the colony. It is hoped, however, that when larger areas of cane are cultivated the business can be made more profitable.

The decrease in importations of corn-meal and hominy is very marked, and is understood to arise from the fact that more corn is raised than formerly, and because rice is being substituted therefor to quite an extent. In 1881 the number of barrels of corn-meal and hominy imported was 14,250, valued at $57,618, against 8,847 barrels, valued at $37,452, in 1882. Of wheaten flour there were imported in 1881, 24,541 barrels; in 1882, 22,716 barrels; also showing a small decrease.

Exports.—In items of exports there has been an increase in cave earth or guano, 1,100 tons, worth $4,928, being exported to the United States in 1881, and 1,987 tons, worth $20,380, in 1882. It is thought, however, that the supply of this fertilizer, which is found exclusively in caves, is very limited, and will soon be exhausted. The export of bananas has increased about 20 per cent., and cocoanuts at least 200 per cent. During the season of 1882 the pineapple trade was very brisk and was reasonably profitable. The crop was large, was marketed in fair condition, and brought remunerative prices. There was shipped to the United States in 1882 something over one hundred cargoes, mostly in American bottoms, amounting to 462,000 dozen, worth, at declared invoice values, $141,000. The shipments in 1881 were 323,000 dozen, worth $109,000. There was also a marked increase in the shipments of preserved pineapples, put up in sugar in cans, the factories here being briskly employed during the season, and shipping 354,000 cans, worth $43,000, invoice value, as against 264,000 cans in 1881, worth $32,800. The preserving of other fruits, tomatoes, and of conchs has increased, the shipments being 26,000 cans in 1882 against 7,000 cans in 1881. Fresh tomatoes also show an increase, 6,700 crates being exported, as against 4,517 in 1881. In oranges there was a very large decrease owing to the ravages of the scale insect, which destroyed many trees; the exportation being only 2,565,000 oranges in 1882, as against 4,116,000 in 1881, causing a serious loss to many small growers.

In the item of sponges the increase has been very marked, a brisk trade continuing all through the year, prices being well maintained. In 1881 there were shipped to the United States 234,529 pounds of sponges; declared value, $113,643. During 1882 the amount shipped was 464,748 pounds, valued at $190,752. Never but once before (viz, in 1880, when the value of the sponge shipped to the United States reached $102,428) have the yearly shipments to that country exceeded $70,000—all of which shows a rapid development of the traffic in sponges, which now ranks as the most valuable industry of the Bahamas. As I have in former reports elaborately presented the sponge and pineapple industries of this colony, I will forbear saying more upon these topics.

THE NEW TARIFF.

Considerable interest has been felt in this colony over the changes made in the United States tariff, which took place on July 1, especially as some of the modifications affect the exports of the Bahamas.

The placing on the free list of bananas, pineapples, and sundry other fruits which have heretofore paid from 10 to 20 per cent. duty was hailed with pleasure, and has given much encouragement to planters and shippers to increase the production, and has imparted a fresh stimulus to the industry. The reduction of the duty on fruit preserved in its own juice was also acceptable. It is believed that an impetus will thus be given to the pineapple trade that will prove highly beneficial both to this colony and to the United States where the fruit will be shipped and the proceeds spent.

In former years the salt industry of the Bahamas, including Turk's islands, which then belonged to this colony, was one of much importance, but the duty in the United States on foreign salt has of late been greatly detrimental to the salt interest here. The concession under the revised tariff by which the duty of imported salt will be remitted when the same has been used for curing fish or packed or smoked meats for export, has given much satisfaction to the salt manufacturers of this colony, who claim that their salt has special excellences for curing purposes, and that it will now be in demand in the United States, the removal of the duty of 6 cents per bushel enabling American packers to use it profitably. If their theory be correct we may look for a revival of the salt industry of these islands, which will be of benefit to both countries. These changes and concessions under the revised tariff have increased the kindly feeling which has long obtained in the colony for the United States, and has strengthened the desire of the people for closer trade connections with that country.

NAVIGATION.

The navigation of the Bahamas for 1882 shows a decrease in the number of vessels arriving and departing as compared with 1881, but an increase in the registered tonnage as follows:

Ships arriving in 1881, 483; tonnage	113,983
Ships arriving in 1882, 443; tonnage	133,701

Steamers.—The number of steamers arriving at the different ports of the colony in 1882 was 78, with a tonnage of 99,639 tons, as against 72 in 1881; tonnage, 76,746. Of those in 1882, 33 were under the American flag; tonnage, 45,947; in 1881, the number was 35; tonnage, 40,251. Under the British flag the arrivals in 1882 were 41; tonnage, 50,636; in 1881, 37 steamers; tonnage, 36,495.

This colony is connected with the outer world by five lines of steamships. The Mallory line of New York, American, performs 18 trips per annum between New York and Matanzas, Cuba, calling both ways at Nassau, and carrying the British and American mails, for an annual subsidy of about $26,000, paid by the colony. Their contract expires in May, 1883, when the service will be continued by the New York and Cuba Mail Steamship Company of New York, also an American line. The Atlas line of steamers, British, plying between New York and West Indian ports, makes weekly calls both ways at Inagua, one of the out islands. The North and South American and the Pacific Company's steamers (both British) trading between New York and West Indian and South American ports, also make regular stops at Fortune Island, one of the Bahamas. The principal object for which these three lines stop in the Bahamas is to ship laborers and return them, to aid in loading and discharging cargo at foreign ports. They, however, carry passengers and freight, but no mails for the colony.

The London line of steamers, British, connects the colony directly with Great Britain, making regular trips between London and British Honduras, touching at Nassau, and at Kingston, Jamaica. They arrive about once in six weeks and serve to keep up a moderate trade between the mother country and her colony. The line was established in 1880, and originally plied between London and Nassau, via Bermuda. The business furnished by these two colonies was too limited to be profitable, and so Belize and Jamaica were added, and I think the enterprise is now a fairly remunerative one. The exports to England by this line, from the Bahamas, consist mainly of sponges, shells, dye and cabinet woods, and cotton. This line has also developed some trade between this colony and British Honduras, which promises to increase and to be beneficial to these islands. The curious feature of the trade is that the articles which this colony exports to its sister colony are first imported into the Bahamas from the United States, such as liquors, butter, candles, cheese, cotton goods, hardware, salted meat, nails, oils, soap, and rice. Imports in return are received of specie, raw hides, and sarsaparilla bark—50,000 pounds of which latter was received in 1882 and sent to the United States.

Sailing vessels.—The number of sailing vessels arriving in 1882 was 365, tonnage, 34,065, as against 411 in 1881, tonnage, 37,237. Under the American flag there arrived in 1882, 119 vessels; tonnage, 14,838, as against 133 in 1881, tonnage, 19,854. This decline in American tonnage is due to the fact that steam communication between the United States and the Bahamas is now excellent, and the fact that several large sailing vessels, built and owned in this colony, are engaged in making regular trips between the islands and the United States. The arrivals under the British flag in 1882 were 227, tonnage, 18,015, as against 233 in 1881, tonnage, 14,687. Of the 119 vessels arriving in 1882, under the American flag, about four-fifths were for fruit, the carrying of which will necessarily largely remain in the hands of American shipowners.

A WINTER RESORT.

The fact that the Bahamas furnish a very desirable winter sanitarium for invalids, as well as a pleasant resort for those who wish to avoid the rigor of a northern climate from December to April, is too well known to require even confirmation at my hands.

The winter of 1882-'82 was a fairly prosperous one in this regard, about 300 Americans visiting the city of Nassau during the season. The abandonment of the southern service between Nassau and Florida decreased the number of strangers who came, but as those who came remained longer, the winter was a profitable one to the colonists. The infrequency of mail communication and the absence of a cable, are drawbacks which will, until these wants are supplied, prove insurmountable barriers in the way of the Bahamas becoming a general winter resort, notwithstanding their salubrious climate and many other advantages.

THOS. J. McLAIN, Jr.,
Consul.

UNITED STATES CONSULATE,
Nassau, N. P., May 14, 1883.

TRADE BETWEEN PORT STANLEY AND ST. THOMAS AND THE UNITED STATES.

REPORT BY COMMERCIAL AGENT CARROLL.

In my last report on the trade of the district, which is embraced in No. 21 of the Commercial Reports, published in July, 1882, I gave a detailed statement of the imports thereinto during the year 1881, showing the character and quantity of each article, together with the duty thereon specifically and in the aggregate, and, in view of which, I have deemed it inexpedient to traverse the same ground in the preparation of the present statements, especially as the character of the importations and the duties thereon are substantially the same as those of 1881.

Such changes as have taken place in the Canadian tariff were subsequent to the close of the year 1882, and those I submitted in my No. 95, so that it does not appear necessary to allude to them here, other than to say that they did not affect the importations of 1882.

As will be observed, the imports from the United States, during the year 1882, augmented steadily, quarter by quarter, making an aggregate increase over 1881 of $59,005, and over 1880, $79,652, this, too, notwithstanding that no apparent efforts have been made by Americans to extend their trade in this district, although I suggested in the report previously adverted to that an opening in that connection evidently existed.

The exports from the district have largely increased over those of former years, those for 1882 amounting in value to $804,937.52; the fourth quarter of 1882 showing an increase over the corresponding quarter of 1881, of $39,414.90.

The exports are composed principally of wheat, clover seed, barley horses, lumber, staves, cattle, sheep and lambs, household effects, &c. For a few years these are likely to increase, after which, it is believed, they will diminish; especially will this be so as to lumber; taking into consideration the rapid consumption and shipment thereof, this part of Canada will soon be denuded of its forests.

Since submitting my report for 1881, St. Thomas has increased largely in population and industries; but as I am now collecting data in connection therewith upon which to base a separate report, I only refer thereto in passing.

With reference to the four great railroads centering in this city, it may be of interest to state, that three thereof have been merged as follows, viz:

The Great Western and London and Port Stanley with the Grand Trunk Railroad, and the Canada Southern with Michigan Central Railroad.

The result of this amalgamation, so far as St. Thomas is concerned, has not been definitely determined, some thinking it will benefit it, and others, that it will be injurious thereto.

In conclusion, it may be proper to say, that I am indebted to the Canadian officials from time to time for courtesies, to whom, through the Department, I beg to express my acknowledgements.

PHILIP CARROLL,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Port Stanley and St. Thomas, Canada, April 28, 1883.

Statement showing the value and character of the exports from the consular district of Port Stanley and St. Thomas, Canada, to the United States, exclusive of the agency at Courtwright, during the calendar year ended December 31, 1882, *viz:*

Wheat	$175,875 60
Clover seed	119,529 57
Horses	59,753 50
Barley	56,530 00
Lumber and railroad ties	54,775 43
Cattle	45,667 25
Stoves	54,764 97
Sheep and lambs	32,951 95
Hoops	32,093 84
Household effects	36,299 45
Potatoes	26,439 98
Eggs	20,616 80
Bolts	12,688 14
Beans	12,254 26
Malt	11,702 16
Oats	8,734 16
Flax	8,173 42
Breeding animals	10,482 00
Scrap iron	6,135 75
Rattan	3,690 00
Flour	2,038 75
Oak bark	1,975 00
Bran	1,764 00
Hogs	622 00
Tan bark	800 00
Split pease	2,803 00
Turnips	1,874 40
Old machinery	300 00
Tobacco cuttings	281 96
Ashes	266 00
Butter	781 00
Miscellaneous	2,273 28
Total	804,937 52

Statement showing the aggregate value of imports from the United States into St. Thomas Canada, together with the gross amount of duty collected thereon, by quarters, during the calendar year ended December 31, 1882, *viz:*

	Value.	Duty.
First quarter	$72,441	$12,304 59
Second quarter	73,294	12,950 21
Third quarter	99,849	19,273 43
Fourth quarter	104,977	19,902 95
Total	350,561	64,431 18

RECAPITULATION.

Exports from St. Thomas, Canada, into the United States during the year 1882	$804,937 52
Imports from the United States into St. Thomas during the year 1882	350,561 00
Difference in favor of the exports	454,376 52
Imports from the United States into St. Thomas, Canada, during the year 1881	291,553 00
Increase of the imports of 1882 over those of 1881	59,008 00
Duty realized by the Dominion Government on goods imported into St. Thomas during the year 1882	64,431 18
Increase of the duty realized over 1881	12,643 13

CONDITION OF TRADE IN ONTARIO.

REPORT BY COMMERCIAL AGENT BUFFINGTON, OF CHATHAM.

The calendar year ending December 31, 1882, was one of remarkable prosperity for the province of Ontario. Labor was abundant and wages remunerative. The crops were exceptionally good.

The November report of the Bureau of Statistics gives the area under grain crops for the year at 5,002,067 acres, or 48 per cent. of all the cleared land. The acreage and production of each crop are given as follows: Fall wheat, 1,188,520 acres, 31,255,402 bushels; spring wheat, 586,817 acres, 9,665,999 bushels; barley, 848,617 acres, 24,284,407 bushels; oats, 1,375,415 acres, 50,097,997 bushels; rye, 189,031 acres, 3,549,898 bushels; pease, 557,157 acres, 10,943,357 bushels; corn, 206,924 acres, 13,420,984 bushels (in the ear); buckwheat, 49,586 acres, 1,247,943 bushels. The total of spring and fall wheat is 1,775,337 acres, yielding 40,921,401 bushels, or an average of 23.05 bushels per acre. The total produce of beans is computed to be 409,910 bushels; of potatoes, 18,432,145 bushels.

EXPORTS TO THE UNITED STATES.

As a consequence of this prosperous condition, the exports to the United States for the year ending December 31, 1882, show a large increase in value, amounting to $621,615.90, against $455,459.24 the preceding year, being an increase of $166,156.66.

All appearances now indicate that this increase will not be maintained for the year ending December 31, 1883. There is only about half the quantity of cordwood and not more than two-thirds as many elm bolts ready for shipment as there were at this time last year.

Malt, which has heretofore been a heavy article of export, after June 30, unless the Dominion Government shall grant the request of the Maltsters' Association to remove the excise duty now levied upon it, and place a tax stamp on beer, will virtually cease to be an article of export, as the disadvantageous position in which Canadian maltsters have been placed by the recent changes in the American tariff renders successful competition with American maltsters impossible.

THE TRADE IN ELM TIMBER.

There are large tracts of low-lands in this district covered principally with elm, and of late years, owing to the demand for hoops and staves in the American markets, a large number of staves and hoop mills have been started along the lines of railway, affording employment to hundreds of men and requiring a considerable amount of capital. Similar establishments have sprung up on the American side of the border, the elm being obtained from Canada in its natural state.

CANADIAN RECIPROCITY.

The Canadian manufacturers have shown a disposition to monopolize this trade, and for a year past have zealously endeavored to induce their Government to impose an export duty on elm logs and bolts, with a view of retaining the supply for themselves and shutting out the American buyers of raw material.

They have not yet succeeded in securing the imposition of such an obnoxious tax, but should their efforts ultimately be successful, some change in our tariff would be necessary to place the American manufacturer in at least as good a position to supply the American market as his Canadian rival.

HOW TO INCREASE AMERICAN TRADE IN CANADA.

While the exports to the United States from this district have continued to increase year by year, chiefly of the products of the forest and farm, there has been no corresponding increase in the direct importation of American manufactures, a state of things which, considering the proximity of American markets and the general preference for American goods, seems to be anomalous.

The duty on English and American goods is precisely the same, and the lower freights ought to give our manufacturers an advantage over their more distant rivals. I think a great improvement in reciprocal trade might be effected by the reduction of the United States duties on Canadian produce, a step which could not injure the American producer, as both countries are exporters of the same articles to a common market.

This would enable our shippers to enter the Canadian market and export its produce through American channels. Trade relations would thus be developed, and with the strong feeling which prevails in this district in favor of closer business relations, I feel confident Canadian trade would soon become a very important one to our manufacturers and wholesale dealers.

CEREALS.

It is too early to speak intelligently of the crop prospects in this section with the exception of winter wheat.

This has been a staple crop in Western Ontario, and for many years in succession has yielded large returns. The past winter has not been favorable, however, and a large proportion of the wheat has been winter-killed.

The prospect is that the crop will not exceed one-half the usual average. Indeed a great many acres have been plowed up to be replaced by spring grain.

The corn area will be largely increased in consequence and the loss to the country will not be so great should the season be favorable, as the Government returns show that corn is almost as profitable a crop as that in the western districts of this province, the average being only one dollar less per acre.

EMIGRATION TO THE UNITED STATES.

Notwithstanding the general prosperity existing in this section of Ontario, the emigration from here to the United States for the past year has been larger than the year previous, and seems still to be on the increase. A majority of those emigrating are men in the prime of manhood, most of them possessing sufficient means for starting fairly in the battle of life in the new homes they have chosen.

As a class they are a desirable acquisition to the population of the United States.

H. C. BUFFINGTON,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Chatham, Canada, May 5, 1883.

AMERICAN PROPRIETARY MEDICINES IN BELGIUM.

REPORT BY CONSUL TANNER, OF LIEGE AND VERVIERS.

My dispatch No. 37, published in No. 25 of Consular Reports, has attracted some attention from those who deal in patent medicines both in the United States and in England. I have in consequence received many letters of inquiry from both countries. I have answered promptly all those coming from the United States. In order to be as precise and practical as possible, I herewith inclose an advertisement of Hop Bitters, which may give our dealers in patent medicines a more thorough insight into what is required to introduce their goods than any plan I could devise.

Hop Bitters are here in full force, and have come to stay, by just such a method as the simple inclosure is a key to, and which is so well known with us. The inclosed advertisement* is distributed throughout the city, and handed to every passer-by. In the United States seventy-five persons out of a hundred now refuse such advertisements when offered them on the streets. I have never seen one refused here, nor have I ever seen one cast aside without being read.

There is no country therefore where printer's ink is more potent. In each shop where Hop Bitters are sold, there is also a larger card than the one inclosed, on the same style, indicating that this article is dealt in. Since my dispatch No. 27, I am glad to see other familiar medicines in the inwindows here, among them Allen's Hair Vigor; wherever one of these medicines is seen there also is seen the introducing agency, the card, gay and attractive enough to catch the eye of the passer-by and call attention to the article.

The same thing is true also of our tobacco, cigars, and cigarettes. The Belgians and French take much pride in their show windows, and arrange them in a style bordering on the artistic; and when they can find a chromo like that which is given to dealers in Richmond Gem Tobacco, or an attractive card like that which is given by the Chicago cigarette exporters, in many instances the article is bought so that the show-window may be embellished by the advertisement. It will be seen by the inclosed advertisement that Hop Bitters retains its English name, and I would recommend this plan to all others. An idea pervades people that things that are foreign possess superior virtues to those found at home, and this is as much the case in Belgium as in the United States; therefore the foreign name is a recommendation. Dispatch No. 27, in addition to the letters written to this consulate, occasioned a visit from Mr. Charles Delacre, a well-known pharmacist of Brussels, who deals extensively in patent medicines, both American and English. He had a plan to mention by which American medicines might be introduced, which I asked him to write out for me and I would submit to the Department, which I herewith inclose. I shall offer no comments thereon, preferring that the American dealer should follow his own judgment in the matter.

Mr. Delacre I am satisfied possesses all the energy and other requisites for an intermediary should the American dealer approve his plans. I beg to take this occasion to say to American dealers, that, while it affords me pleasure to be of the slightest service to them, that a consul who performs strictly his duties should be spared as much as possible unnecessary inquiry, that takes up his time, and which requires for an answer a repetition of what he has already written. I have no doubt that parties in most instances who make these inquiries do so from having seen short and imperfect extracts in some journal of the report, when, were they to see it in full, everything would be clear to them.

---

*This advertisement is in the form of an American flag, 3½ by 6½ inches, with the reading matter (in French) on the white stripes.

GEO. C. TANNER,
Consul.

UNITED STATES CONSULATE AT LIÉGE AND VERVIERS,
June 5, 1883.

Mr. Delacre to Consul Tanner.

Belgium is a rich country, and any good article of real utility is sure to meet a proportional demand, if properly worked. If I were to introduce an article into Belgium I would proceed as follows:

First of all, be introduced to a firm that has a large connection amongst the public, so as to give authority to my products by its patronage, and also a large connection in the trade. It should be, of course, reliable, honest, well acquainted with the habits of the people and the mediums of advertising, value of papers, their circulation, &c.

Having chosen such a firm, make with it a contract of standing, so as to allow it to derive profits from trade, as well as for its help, advice, and guidance, and the successful introduction of the article into public use. Then study a plan of advertising, as there are for the same a good many shapes. Proprietary articles may address the medical body exclusively, and so do Lactopeptine, Maltine, Dr. Fellow's Hypophosphites, &c.; some other ones may address the public, viz: Hop Bitters, Mother Siegel's Sirup, Perry Davis's Pain Killer, Holman's Pad, &c.

When the mode has been decided upon, it is easy to calculate the amount to spend in advertising. In the first case, medical papers, samples, letters, and circulars to medical men, to chemists, druggists, midwives, veterinary surgeons, &c. In fact, it entirely depends upon the article. In the second case, I may mention political papers and prospectuses or pamphlets, to be widely distributed. Besides these there are a great many various shapes of advertising—show cards, chromos, almanacs, albums, fans, easels, &c. In fact, it is the agent's duty to send his friend his suggestions, advice, hints, so as to challenge attention with something new. Another shape of advertising consists in posters and boards on the walls, in the railway carriages, on the trams, &c. When the line has been well studied and agreed upon, a consignment is necessary, so that the agent may send a small supply, on sale or return, to all his friends, and this is generally done this way: A letter is sent to the profession telling them such or such preparation is going to be advertised, and that the agent would be pleased to send them a small consignment order, on sale or return. Ask them whether they wish for handbills and show cards, and propose to them besides the usual discount, a premium at the end of the year, if their purchases reach certain amounts. The agent should send a monthly statement of sales and remittances for the same. He ought, besides this, keep account of the sales in the various towns and at the principal chemists' so as to see where his efforts are to be made or increased or given up. Then after the first year's trial it is wise to proportion the advertising budget to the sales effected. It is easy to understand the importance of the agent's acquaintance with the newspapers and the populations of the various towns wherein he must have representatives to call upon every one connected with the sales. One must not lose sight of the fact that Belgium is not so large a country as the States, and consequently does not present all the resources of the latter. The means must be proportioned to the expected results. If the product is of real utility and properly presented to the public it is sure to meet with success.

FOREIGN COMMERCE OF BELGIUM.

REPORT BY CONSUL STEUART, OF ANTWERP, ON THE GENERAL TRADE OF BELGIUM AND ITS TRADE WITH THE UNITED STATES.

1.—GENERAL TRADE.

From tables of statistics, just issued from the ministry of finance for Belgium, giving the commercial movement of the kingdom with foreign countries for the month of March, 1883, and also a comparative statement of the same for the first quarter of the years 1883, 1882, and 1881, we find the result to be unfavorable for the first three months of the present year, as follows:

The amount of importations for the month of March, 1883, was about the same as that for March, 1882, but the amount of exportations for the same time show a decrease of seven per cent.

During the first three months of 1883, as compared with 1882, there was a decrease of 6 per cent. in the amount of importations into Belgium, and a decrease of 10 per cent. in the amount of exportations from Belgium.

The following tables will give the increase and decrease by values of the principal articles of export and import for the first quarter of 1883, arranged according to their importance:

Table showing the increase and decrease of value of importations into Belgium for the first quarter of 1883 *as compared with* 1882.

INCREASE.

	Francs.
Coffee	7,919,000
Flour and meal	2,650,000
Tobacco leaf	2,559,000
Chemicals:	
Soda	2,460,000
Others	1,489,000
Copper and nickel	2,172,000
Potatoes	1,455,000
Wood for building	1,177,000
Hides, rough	941,000
Iron	859,000
Coal	756,000
Resin and bitumes	742,000
Beans and pease	653,000
Animals:	
Horses	540,000
Cattle	337,000
Rye	491,000
Silk	344,000

DECREASE.

Wheat	15,169,000
Guano	4,688,000
Oats	3,155,000
Tallow	2,775,000
Barley	1,955,000
Oil seeds	1,680,000
Meat	1,603,000
Wood: Oak and Walnut	1,587,000
Petroleum	1,427,000
Manufactures of silk	967,000

	Francs.
Linen thread	954,000
Manufactures of wool	709,000
Wine	435,000
Animals: Hogs	377,000
Clothing	351,000
Rags	344,000
Lace	316,000
Cast iron	304,000
Fancy goods and hardware	301,000

Table showing the increase and decrease of value of exportations from Belgium for the first quarter of 1883 as compared with 1882.

INCREASE.

	Francs.
Oil	1,573,000
Meat	1,461,000
Rice	1,296,000
Zinc, unworked	914,000
Window glass	895,000
Window glass, worked	707,000
Coal	814,000
Wool	807,000
Stones	765,000
Arms	751,000
Hides, tanned	661,000
Oil seeds	583,000
Flour	514,000
Chemicals: Soda	331,000

DECREASE.

Wheat	12,468,000
Linen thread	3,249,000
Machinery	3,139,000
Manufactures:	
Wool	2,579,000
Others	890,000
Oats	2,301,000
Manufactures of linen	1,538,000
Woolen thread	1,504,000
Tallow	1,289,000
Steel, worked	1,263,000
Eggs	1,184,000
Sugar	1,118,000
Hides, tanned	1,068,000
Guano	960,000
Rye	858,000
Candles	790,000
Iron:	
Worked	747,000
Rails	326,000
Old	343,000
Others	619,000
Cast	513,000
Petroleum	694,000
Rags	601,000
Copper and nickel	543,000
Paper other than hanging	512,000
Lead	447,000
Starch	394,000

II. TRADE WITH THE UNITED STATES.

Imports.

Looking at the articles in which we are most directly interested we find the following results: First and most important on the list is wheat. The total amount of importation from all countries during the quarter was 141,279 tons, being a decrease of 52,000 tons from the corresponding quarter of the preceding year; the decrease was as follows: From India, 43,000 tons; from the United States, 1,600 tons; and 7,000 tons from Russia. There was an increase of 9,000 tons from Roumania and 7,000 tons from Germany. The amount received from the United States in March, 1883, was 17,736 tons.

In rye there was an increase in the total importations of 2,150 tons, but there was a decrease of about 180 tons in the quantity coming from the United States. The amount received from the United States during the month of March was 1,145 tons.

The decrease in receipt of *corn* and *oats* for the quarter was 16,000 tons; the decrease from the United States was 9,300 tons, and the amount received from there in March was 2,362 tons.

Coffee shows an increase of 5,290 tons for the quarter as follows: Increase from Brazil, 1,600 tons; France, 2,900 tons; from Holland, 650 tons; and the United States, 140 tons. The amount received from the United States in France was 157 tons.

Flour and meal.—The total increase in the importation for the quarter was 4,800 tons. The increase from the United States was 3,500 tons and the amount received in March was 877 tons.

Meat must necessarily show a continued falling off. The decrease for the quarter was 1,100 tons, as compared with 1882, and 6,500 tons as compared with 1881. The amount imported from the United States during March was only 977 tons. A few more prohibition decrees and the article will be lost from our table of exports.

Dried fruit was received from the United States during the quarter to the amount of 28,178 francs, being an increase of 23,000 francs. The amount received in March was 20,699 francs.

Vegetable oils show a decrease in the amount coming from the United States for the quarter of 360 tons. The quantity imported from there during March was 69 tons.

Guano shows a decrease of 14,200 tons for the quarter. The total receipt for the first three months of 1883 was only 2,250 tons, and this came from England, France, and Holland.

The quality of lard coming from the United States during the quarter was 1,152 tons, being 3,400 tons less than the amount received during the corresponding quarter of 1882, and the amount imported during March, 1883, was 658 tons.

Petroleum.—The quantity received for the quarter was 19,395 tons against 26,632 tons in 1882, being a decrease of 7,237 tons. The amount received in March was 5,885 tons.

The decrease in rosin and bitumen from the United States for the quarter was 1,600 tons.

Leaf tobacco shows an increase of 1,500 tons. The increase from the United States was 980 tons and the amounts received during March was 504 tons.

Exports.

During the month of March, 1883, there was exported to the United States from Belgium merchandise as follows: Arms, 83,460 francs; clothing, 26,209 francs; laces, 3,000 francs; 242 tons of rags; 125 tons of machinery; 604 tons of steel; 1,672 tons steel rails; 422 tons wrought steel other than rails; 160 tons iron wire; 200 tons iron nails; 1,150 tons manufactured iron; 44 tons zinc; 36 tons paper; 188 tons of raw skins; 5 tons of stones; 51 tons of soda; 36 tons cotton goods; 3 tons woolen goods; 23 tons of linen goods; 6 tons of glass bottles; 97 tons of mirrors; 3,000 tons of window glass, and 28 tons of fine cut-glass ware.

The amount of customs duties collected during the first quarter of 1881 was 6,253,549 francs; for the first quarter of 1882 was 6,854,705 francs, and for 1883 it was 7,627,188 francs.

The following tables give the direct trade, the importations and exportations between the United States and Belgium for the first quarters of 1881, 1882, and 1883:

Table showing the importations from the United States into Belgium for the first quarters of 1883, 1882, *and* 1881.

Articles.	1883.	1882.	1881.
Arms ..... francs..	108, 811	138, 556	10, 960
Fruit, dried ..... do....	28, 178	5, 059	64, 872
Chemicals ..... do....	730, 000	....	....
Wood, for building ..... cubic meters..	3, 194	2, 180	1, 351
Grain:			
Wheat ..... tons..	46, 033	62, 529	56, 108
Rye ..... do....	1, 894	2, 166	4, 612
Corn and oats ..... do....	2, 364	11, 631	10, 951
Flour ..... do....	4, 213	763	5, 867
Petroleum ..... do....	19, 394	26, 632	14, 256
Meat ..... do....	3, 172	4, 760	9, 580
Rosin and bitumen ..... do....	2, 594	4, 123	2, 469
Tobacco:			
Leaf ..... do....	1, 282	307	776
Manufactured ..... do...	3	4	1
Lard and tallow ..... do....	1, 152	4, 581	4, 016
Coffee ..... do....	783	643	371
Oil ..... do....	107	469	60
Starch ..... do....	39	25	108
Peas and beans ..... do....	13	....	....
Hides, raw ..... do....	4	25	33

Table showing the exportations from Belgium into the United States for the first quarters of 1883, 1882, *and* 1881.

Articles.	1883.	1882.	1881.
Arms ..... francs..	255, 610	185, 133	152, 750
Clothing ..... do....	217, 529	11, 041	16, 110
Mirrors ..... do....	278, 300	228, 700	145, 600
Linen goods ..... do....	23, 300	....	18, 000
Lace ..... do....	20, 800	....	....
Glass:			
Window ..... tons..	5, 664	3, 554	4, 379
Bottles ..... do....	6	....	83
Fine cut and gilded ..... do....	118	47	24
Other, common ..... do....	....	47	54
Steel:			
Rails* ..... do....	1, 672	....	....
Other* ..... do....	422	....	....
Cast ..... do....	604	300	....
Iron:			
Bar ..... do....	1, 515	569	57
Cast ..... do....	16	....	....
Old ..... do....	....	4, 280	6, 715
Wire ..... do....	160	268	279
Rails ..... do....	200	1, 000	300
Wrought ..... do....	22	323	5
Hides, raw ..... do....	350	194	413
Rags ..... do....	310	1, 282	25
Machinery ..... do....	144	20	....
Lard and tallow ..... do....	140	136	25
Zinc ..... do....	125	484	207
Wool ..... do....	79	31	64
Chemicals ..... do....	60	3	....
Cotton goods ..... do....	58	79	17
Hops ..... do....	54	....	....
Paper ..... do....	38	14	20
Woolen goods ..... do....	11	22	18
Stones ..... do....	7	5	96
Books ..... do....	1	1	....
Vegetables:			
Potatoes ..... do....	....	461	....

---

* It is only since the 1st January, 1883, that these articles have been rendered separately.

The prices ruling to-day on the Antwerp market, for the following American products, is as follows:

American red wheat 26 francs, and California white wheat 25½ francs, per 100 kilometers. American flour in sacks 32 francs, and Saint Louis flour 38 francs, per 100 kilometers.

Petroleum, 19 francs per 100 kilometers. Stock, about 100,000 barrels.

Lard.—The Wilcox brand, 140½ francs; Fairbanks and Fowler, 140 francs; Chamberlain and McFarlane, 139½ francs, per 100 kilometers; estimated stock 3,000 to 4,000 tierces and about 2,000 buckets.

Meat.—Long middles, 130 francs; short middles, 138 francs; shoulders, 109 francs, and smoked hams 170 francs, per 100 kilometers. Stock on the market, about 1,000 boxes.

JOHN H. STEUART,
Consul.

CONSULATE UNITED STATES OF AMERICA,
Antwerp, May 14, 1883.

THE PROTECTIVE POLICY IN CANADA.

REPORT BY CONSUL CRAWFORD, OF COATICOOK.

The question is often asked, "What has been the effect of the national policy upon the business of the Dominion?" To answer this, it would only be necessary for any one who was at all familiar with this country three years ago to visit any part of Canada now, to become convinced that it is doing much to build up and develop her manufactories, mines, agriculture; and above all this, its effects are felt by the laboring masses.

It has increased greatly the demand for both skilled and unskilled labor, and all are now employed at wages from 20 to 50 per cent. higher than before its adoption.

As the wages of the laboring men and women have increased, the people have been able to live better, dress better, and surround themselves with many of the comforts of life that before they were forced to dispense with.

There are those who say "the national policy has not done for the Dominion what its friends expected," and point to the fact that at the close of the first year after its adoption the balance of trade was found to be against them.

It should not be forgotten that previous to the time the law was passed increasing largely the rates of duties Canada was buying most of her manufactured goods from foreign nations, and her exports were mostly the products of the soil. The value of their exports fell far short of her imports. Although she is now buying less of some classes of foreign goods the value of her imports has increased, as is evident from the increase of revenue from customs for the five months ending November 30, 1882, as compared with a like period for the year 1881.

Statement of the revenue received by the Dominion for the month of November, 1882, *compared with November*, 1881.

Description.	1882.	1881.	Increase.
Customs	$1, 820, 316 16	$1, 719, 109 15	$101, 207 01
Excise	654, 898 84	602, 020 23	52, 878 61
Other sources	621, 857 08	538, 215 34	35, 641 74
Total	3, 097, 072 08	2, 859, 344 72	169, 727 36

Comparative statement of revenue for the five months ending November 30, 1882.

Description.	1882.	1881.	Increase.
Customs	$10, 405, 736 85	$9, 012, 546 90	$1, 393, 189 95
Excise	2, 806, 266 18	2, 507, 495 38	298, 770 80
Other sources	2, 371, 830 19	2, 281, 300 56	90, 529 63
Totals	15, 583, 833 22	13, 801, 342 84	1, 782, 490 38

The increased demand for machinery and iron for her new manufacturing industries, for which she is in a great degree dependent upon foreign nations, has more than counterbalanced the falling off of the manufactured articles now furnished from her own factories; so, where she has saved on the one hand she has lost on the other.

The products of her farms, her forests, and her mines, are about all she has to send abroad. She has not yet arrived at that point as a manufacturing nation when she has many manufactured articles to dispose of other than to her own people, and the home demand is at present, and will be for some time to come, greater than she can supply.

The people being able to save more necessarily spend more; this, with the increasing population—it being over 80,000 the past year—creates a greater home market for her products and a greater demand for a class of goods not yet manufactured in the Dominion, or, if manufactured, is not sufficient to supply the demand. Until that time arrives, when competition shall reduce prices, or there is a production of goods beyond what is required for home consumption, the manufacturer has a monopoly, and prices will be kept up. The effect of this monopoly is seen in the value of stocks, especially cotton stocks, which are selling from 50 to 70 per cent. premium.

Semi-annual dividends of 10 per cent. are declared, and the surplus savings, which in many cases are as much more, are being used to enlarge their factories.

The large profits derived from the investment of capital in the general industries of the Dominion have not escaped the attention of the American capitalist, and many from the United States are investing their money in Canada.

The field for investment is yet wide; there are many industries yet undeveloped. Scores of the smaller, though no less important, ones are yet wholly neglected, and with ample protection and a good home market an investment in them would be sure to pay a large profit to the investor.

There seems to be a desire on the part of Canadian capitalists to obtain investments from people in the United States, not so much for the money they may put in, as it is to have, as they term it, "*a little of the Yankee energy employed*," which will insure success in developing new industries. They are not content to plod on at the slow pace of the Englishman. The field of operation now open is so wide and the profits so large that they feel the necessity of an immediate occupancy, and for that reason they are anxious to have more interested who will "*push things.*"

We have in all parts of the United States young men who are looking about them to find some opening where they can start out in life for themselves, clear-headed, honest hearts, and determined wills, *experts* in the business in which they are engaged; with little or no capital, they are forced by circumstances to occupy some subordinate position when they are fitted for something better. If they attempt to step out for themselves they find the ground already occupied, and capital concentrated drives them in many cases from any enterprise in which they would engage.

To such, it seems to me, there is a field open in the Dominion of Canada. There is capital here seeking investment, industries undeveloped, and all that is wanted is experienced men of brains and integrity to join their skill with this capital, and in this way many of our young men could occupy the position of managers and share in the profits of these industries.

J. G. CRAWFORD,
Consul.

UNITED STATES CONSULATE, *Coaticook.*

AMERICAN SALTED MEATS IN FRANCE.

TRANSLATED FROM LA GIRONDE, OF BORDEAUX, BY CONSUL ROOSEVELT.

We extract from a note communicated to us by the Chamber of Commerce of Bordeaux, and which had been handed to the minister of commerce by the delegates of the Chambers of Paris, Marseilles, Bordeaux, and Havre united, the following observations concerning the prejudices caused to the merchant marine, as well as to commerce and public feeding, by the prohibition pronounced against American pork (decree of February 18, 1881):

> During these last years the trade of American pork annually procured our merchant marine 50,000 tons freight, representing about 40,000,000 kilograms neat of meat and a value of 50,000,000 francs.
>
> The prohibition caused the country to lose yearly by way of freights, duties, handling, expenses for carting, &c., an amount of 15,000,000 francs, which is the difference of about 30 per cent. between the price paid at the United States and that paid by the consumer to the retail dealer.
>
> * * * The sanitary question seems to us to have been definitively settled by the decisions of the consultative committee of public hygiene, taken in the sittings of August 4, 1879, September 6, 1880, and January 4, 1882, all which decisions being adverse to the prohibition, and rejecting at the same time the micrographic inspections, for this reason, that our country's culinary habits shelter the consumer from any danger. * * *
>
> The question remains, then, to-day what it was yesterday, *i. e.*, a protectionist rather than a sanitary question. As a proof, by examining the votes given in our deliberating assemblies, one may notice that all protectionists voted for the prohibition, and all free-traders for common right.
>
> You are not unaware, Mr. Minister, that prohibition was applied after the emotion caused in the political world by the campaign skillfully and energetically conducted by the dry-salters of Nantes, which campaign was supported by agricultural papers and by the Society of the Agriculturers of France.
>
> This last society, composed for the most part of large proprietors, thought it was

defending the interests which it represents, without considering that it did a grave injury to a not less respectable interest—that of public feeding.

To-day, that the light is made, it seems to us impossible that the Government should maintain such a measure.

There is, besides, Mr. Minister, a point on which we could not call your attention too strongly; that is, that the question of American pork is connected at large with the economical welfare of the country, and that in conditions which present a very serious character.

The prohibition, indeed, by depriving the working classes of a cheap food, has resulted in the increase of the price of food, and in bringing forth, by way of consequences, a corresponding increase in the rate of salaries. By the same act an increase was produced in the rate of workmanship, and the relations between the masters and workmen have become more difficult.

What is most grievous is that such matters spring forth at a time when foreign industry makes the utmost efforts to supplant ours on all foreign markets where we had our principal outlets.

It is quite evident that our export trade has been on the decline for several years past, whilst the importation of manufactured articles increases constantly. The rise in the price of workmanship is not calculated to remedy this sad situation.

The Americans consider the prohibitive measures taken by the French Government as vexatious. A reduction of the importation duties in the United States on French products is extremely desirable for us, as well for the products of our soil as for those of our industry. Now, as long as that prohibition lasts, we must expect, not a reduction of tariffs, but retaliation. * * *

To resume, we claim, Mr. Minister, that the American pork trade should again become free, as it was before February 18, 1881; that we should, in one word, return to common right, as the only means of allowing that trade to resume all its activity, and procuring cheap food to the working classes.

To reach that double aim it is sufficient:

1. To withdraw the bill laid before the Chamber of Deputies.
2. To merely and simply cancel the decree of prohibition.

THE VALLEY OF MONTEREY.

REPORT BY CONSUL CAMPBELL.

THE CITY OF MONTEREY.

I have the honor to submit the following notes bearing upon this rapidly improving city and the growing interests of this state, Nuevo Leon.

Monterey is becoming a city of considerable interest to American citizens. Since the 23d day of February last there have been 2,048 American citizens registered at the principal hotels; three-fourths of this number were looking for investments either in mines, manufactories, agricultural or grazing lands.

The city has a population of about 50,000 inhabitants; is built after the Spanish style, as are all the cities of Mexico, narrow streets and spacious plazas.

The houses are all built of massive stone masonry, the walls being from 30 to 50 inches in thickness, flat roofs, the floors and roofs made of cement.

Each house incloses an open *patio* or court, which is usually ornamented with flowers and shrubbery; four-fifths of the buildings are not more than one story in height, and each house is entered from the street by a single coach door; the windows fronting on the street are all grated with iron bars.

Houses for residence rent for amounts ranging from $20 to $75 per month; business houses from $40 to $200 per month. There are no vacant houses in the city at present, though considerable improvements are going on.

Since the completion of the Mexican National Railroad to this point and the large number of Americans coming here, both rents and labor have nearly doubled in prices.

Ordinary day laborers receive 75 cents per day, first class labor $1. Two years ago ordinary laborers only received from 25 cents to 37½ cents per day. Good house servants can be had from $5 to $8 per month.

The market is well supplied with meats and vegetables all the year round. The ruling prices are as follows:

AVERAGE RETAIL PRICES.

Fresh beef	per pound			$0 08
Choice cuts	do			12½
Fresh mutton	do			8
Fresh veal	do			12½
Fresh pork	do			12½
Dried beef	do			18¾
Lard	do			20
Kid	each	$0 50	to	75
Turkeys	do	1 00	to	2 00
Chickens	do	25	to	50
Fish, none in the market.				
Milk:				
Goats'	per gallon			50
Cows', none in market.				
Butter, American	per pound			75
Cheese, American	do			50
Cheese, Mexican	do			37½
Sugar:				
Mexican peloncillo	per pound	04	to	05
Mexican refined	do	15	to	18
New Orleans cut loaf, United States	do			22
Coffee, Cordova	do			20
Tea, best quality	do			2 00
Chocolate, best quality, Mexican	do			50
Rice	do			10
Flour:				
Mexican	per pound			05
American	do			07
Corn meal, Mexican	per bushel			1 50
Dried beans	per pound			05
Dried apples, American	do			25
Dried quinces, Mexican	do			18¾
Salt, Mexican	do			05
Chili, Mexican red pepper	per gallon			1 25
Black pepper	per pound			25
Kerosene oil, per case of 5 gallons (United States)				3 50
Candles:				
American spermaceti	per pound			37½
Mexican tallow	do			15
Matches, wax	per dozen boxes			37½
Beans, snap	per quart			12½
Peas, English	do			12½
Cabbage	each	12½	to	25
Beets	per peck			50
Onions	per pound			07
Potatoes:				
Irish	do			08
Sweet	do			03
Carrots	per peck			37½
Tomatoes	do			37½
Lettuce, very cheap.				
Eggs	per dozen	12½	to	25

AGRICULTURE.

Monterey is situated at the foot of the Sierra Madre range of mountains, and in one of the most beautiful and productive valleys in the republic, growing in great abundance corn, sugar-cane, and all the cereals, with fine fruits, such as peaches, figs, pears, quinces, and grapes, together with the finest pecan trees, bearing nuts that cannot be surpassed in any country. The valley is supplied with sufficient water for irrigation.

Two crops are raised every year, and the rain never fails to fall in ample quantities to make one of the two crops without irrigation. Sugar-cane is growing to-day within 3 miles of Monterey that was planted twenty-three years ago, and so prolific that replanting was and is now unnecessary.

The Mexican farmers have but few modern appliances in the way of improved agricultural implements. Wooden plows are so extensively used that iron or steel plows are the exception. Wonderful changes, though, will take place in the next few years, and instead of the crooked stick for a plow and a brush heap for a harrow, they will be using the best improved implements.

Stock raising is one of the principal pursuits of the State, cattle raising especially. Even in dry seasons, when the grass is parched, there is generally along the banks of the arroyos a thick undergrowth of shrubs which will sustain life until a fall of rain. The prickly pear, which grows so plentiful in this country, is an excellent food for the cattle. The plant is cut down and thrown on a hot fire until the thorns are burned off. The plants also afford a very succulent and wholesome food for sheep and goats.

Within the past year, and more especially the last three months, many thousand head of both cattle and horses have been bought in this State for export to the United States.

The justly celebrated maguey plant (*Agave Americana*) grows prolific in this State. When the maguey is about to bloom an incision is made into the heart of the plant and the leaves are tied over it. The sap, which flows freely from the incision, is fermented and called pulque, which is the favorite beverage of the Mexicans. Besides the pulque, they also distill a fine alcoholic drink called mescal. After the sap is exhausted the plant dies, and from the pulp of the leaves a good paper is made, the fibrous part of the leaf producing a sort of hemp, called istle, which is worth here 12½ cents per pound.

Another plant, called lechuguilla, grows in great abundance in this State, and produces an istle which is easier to work, but is not of as fine quality as the maguey, selling for about five cents per pound. All the rope and bagging used in this country are manufactured from the fibers of the lechuguilla.

MINING.

The mining interests of this State have also made wonderful strides within the past year. Old mines are being reopened and successfully worked by American capital. Amongst the ores found in the State are, principally, argentiferous lead ores, such as galena and carbonates, the amount of silver contained varying from 5 to 75 ounces to the ton, and in some cases the veins open into pockets which run as high as 300 ounces to the ton. Besides the lead ores, there are found outcroppings of silver-bearing and in some cases gold, bearing copper ores, which, however, have not as yet been thoroughly prospected. The copper ores are found in the primitive formations, which formations, though scarce, are to be seen in several parts of the State.

AMERICAN INTERESTS.

This consulate is constantly flooded with Americans seeking information in regard to the mining and other resources of the State. There are about 350 Americans residing in the city, besides a large number employed on railroad construction between this place and Saltillo. Very few are engaged in mercantile pursuits.

ROBERT C. CAMPBELL,
United States Consul.

UNITED STATES CONSULATE,
Monterey, Mexico, May 27, 1883.

COLOMBIA AND ITS PEOPLE.*

REPORT BY MINISTER SCRUGGS, OF BOGOTA.

THE PLAIN OF BOGOTA.

Perhaps a brief recurrence to the physical and climatic peculiarities of this portion of the Colombian Republic, in continuation of the subject of my previous reports, may not be uninteresting to the Department; and I am the more inclined to crave indulgence on this point since a recent commercial enterprise of an international character has drawn general attention to this country, hitherto comparatively little known even to the people of the United States. It is, however, a country of singular beauty and of inexhaustible resources. Such is its remarkable formation that, although not exceeding in area three of the larger States of our Union, it presents every variety of climate, and is capable of yielding every species of product found in the three zones of the earth, whilst for boldness and grandeur of natural scenery it is probably without a rival on the globe.

But perhaps the most unique display of Andean scenery is found a few miles north of the Ecuadorian boundary. Here the Cordilleras combine into one dizzy ridge before spreading out into three distinct ranges. One of these, bending to the northwest, and lowering its crest as it passes the narrow isthmus, loses its grandeur only in the icy plains of Alaska. The central range, running northward, culminates in Mount Tolima (the highest peak north of the equator), and soon disappears in the blue waters of the Caribbean; while the third or eastern chain, turning to the right and dipping gracefully towards the rising sun, holds in its lap, at an altitude of nearly 2 miles above the sea level, the magnificent plain on which is situated the Colombian capital.

This plain, in its general outline and conformation, may be said to resemble an oval-shaped dish, slightly inclined southeastward, but otherwise perfectly level. The high circular wall of treeless mountains would correspond to the outer rim of the dish, while the inner globe or rim is represented by the foot-hills or "benches." Its extent is about 25 leagues from north to south by about 11 from east to west, and therefore contains an area of about 2,500 square miles. It is well watered by numerous creeks and small fresh-water lakes, besides the river Funza and its immediate tributaries. All these streams have their several sources in the surrounding Sierra, and run in general direction southwestward to the limit of the plain, where they are united and precipitated over the noted Falls of Tequendama, the only visible outlet of the waters of this immense basin.

---

* Continued from Nos. 30 and 31.

The inner rim or wall of this great aerial valley is an undulating ridge of rich loam, underlaid with sandstone. This terminates in a kind of bench or terrace before breaking off into the rugged and barren sierra which rises to a height of from 2,000 to 3,000 feet above the level of the plain.

There is an aboriginal tradition that this entire basin was once the bed of a great fresh-water lake, and there is probably no one fact more clearly indicated by modern geological research than that this tradition had its origin in the existence of a veritable lake, covering the whole area, possibly as late as the eleventh century.

At the time of the Spanish conquest, in 1537, the inhabitants of this region were the *Chibchas*, who, according to Quesada, numbered about three-quarters of a million. Their form of government was essentially patriarchal, and their habits were those of an agricultural people given to the arts of peaceful industry. Their religion contained much to remind us of the ancient Buddhists. It imposed none of those revolting sacrifices of human victims which marked the rituals of the Aztecs. They had their divine Mediata in *Bohica*, or Deity of Mercy. Their *Chibchacum* corresponded to the Buddhist God of Agriculture. Their God of Silence, as represented by earthen images which I have examined, was almost identica lwith the Buddhist God of Wisdom, as represented by the images in some of the Chinese temples. They had also a traditional Spirit of Evil, corresponding to *Neawatha* of the ancient Mexicans, and to the Satan of the Hebrews. And connected with their flood myth was a character corresponding to the Hebrew Noah, the Greek Ducalaine, and the Mexican *Cojcoj*.

The capital of the Chibchan Empire was Bocatá, of which Bogota is manifestly a mere corruption. It was situated near the site of the present Colombian capital. But their most ancient political capital was Manguéta, near the site of the present village of Funza, on the opposite side of the plain. Near the site of the present grand cathedral, in the heart of the present city of Bogota, was a temple consecrated to the god of Agriculture. Here the emperor and his cacique, accompanied by the chief men of the country, were wont to assemble twice a year and offer oblations to the deity who was supposed to preside over the harvests—a ceremony not unlike the "moon feasts" celebrated to-day in many of the interior districts of China.

The altitude of the plain above the sea-level is 8,750 feet, and its mean temperature is about 59° Fahr. The atmosphere is thin, pure, and exhilarating, but it is perhaps not conducive either to longevity or great mental and physical activity. A man, for instance, accustomed to eight hours daily mental labor in New York or Washington will here find it impossible to apply himself closely for more than five hours each day. If he exceeds that limit ominous symptoms of nervous prostration will be almost sure to follow.

The climate is an abnormal one. It is not exactly a temperate zone beneath the equator, as is sometimes represented, and yet, barring its tendency to develop nervous complaints, it is not unhealthful. There is no malaria; yellow fever, cholera, pulmonary consumption, and agues are unknown. Sunstrokes are never heard of, and nobody ever suffers from frost-bitten extremities.

The planting and the harvest season is in each month of the year, and two annual crops may without difficulty be grown on the same soil. I have seen farmers harvesting and sowing in adjoining fields in December, and likewise in July.

I have never found respiration at this altitude either painful or difficult, as many have represented. It is, however, necessarily both deep and rapid, forcing the blood through the veins at a rate of from 80 to 85 strokes per minute. A man, for instance, whose normal pulse is 75 at the coast, will find upon his arrival here that it has reached 80.

July and August are considered the most inclement and disagreeable months of the year. Thus midsummer is known here as the *inverano* or *paramo* season; that is, winter, when the dense mists rising from the torrid plains and valleys below are blown over the bleak sierras and settled over the plain, rendering the air exceedingly damp and chilly. The "rainy season" proper begins about the last of September and continues at intervals until about the first of December. From that time to about the middle of February the climate is almost perfect. The atmosphere is of transparent clearness, pure, crisp, and balmy. The sky is of a dark indigo color, and at night the stars shine out with uncommon brilliance. A moonlight night is something indescribably beautiful. The stars of both hemispheres are distinctly visible, and the "Milky Way," viewed from this altitude, is one of the most gorgeous sights in the tropical heavens. At this season *Ursa Major*, the Magellanic nebula, and the Southern Cross are at once visible in all their splendor. There is very little twilight. The boundary line between day and night is well defined. But if the twilight is marvelously short it is surpassingly beautiful, and a December sunset in Bogota never fails to arrest the attention of strangers.

The lakes and water courses of the plain abound in fish, but only of a single species. These are a kind of slimy eel, not unlike those exposed for sale in the market places of Central China, certainly not very prepossessing in appearance, though quite palatable when properly cooked.

There is also an abundance of water fowl, especially the teal duck, so highly prized in Europe. I believe no effort has ever been made to introduce the shad or other species of fish in the waters of the plain, though there is really no reason why such an effort should not prove both successful and profitable.

The soil of this valley, as I have intimated in another dispatch, seems to be of almost inexhaustible fertility.

The staple product is "Irish potatoes"—a native of the Andes by the way. Maize and a degenerate species of Indian corn grow well, but mature slowly and imperfectly.

Wheat and rye do much better, and are grown in considerable quantities. The strawberries are delicious, and grow without much attention. Rice will not mature in this cool, thin atmosphere. The peaches and apples are almost worthless.

The cabbage and cauliflower are extensively cultivated; but the cabbage never "heads," and is eaten green, as in Florida and Texas. Red-clover is a recent innovation, but has proven quite a success. Here, as elsewhere, in Spanish America, the mule is a necessary appendance of the civilization. But the hog is almost an exotic; nobody ever eats pork or bacon in Bogota. The beef and mutton are excellent, but both are usually spoilt by the butcher.

Bituminous coal of an excellent quality abounds in the foot hills all around the plain, and there is an abundance of iron ore just beyond. But neither is ever seriously molested. The inhabitants continue to use charcoal, prepared many leagues distant and brought hither on pack mules at great expense. Coal oil has been discovered within one day's ride from the national capital; yet people here import petroleum from the United States, at an average total cost of $1.20 a gallon. Those who cannot afford this luxury continue to burn tallow candles.

Some years ago an American company attempted to establish gas works here, but owing to the difficulty and great expense of transporting metallic pipes over the mountains wooden ones were substituted, and the result was almost a complete failure. It is probable that the electric light, as recently perfected in the United States, would under all the circumstances, be cheaper and more practicable in a city like this.

Of course the one great need of this country, paramount to all others, is stable Government and a condition of assured peace. Secondary to this, its greatest need is some means of cheap and rapid inland transportation. Perhaps, however, it is not too much to say that, with the first of these wants supplied, the second would in due time legitimately follow; and therefore that the only really essential condition to the prosperity and future affluence of a country so favored by nature is good government. Perhaps, however, the same may be said, with almost equal truth, of most of the other Spanish American States.

WILLIAM S. SCRUGGS,
Minister.

UNITED STATES LEGATION,
Bogota, December 20, 1882.

ELECTRIC LOCOMOTIVE HEADLIGHTS.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

Recent experiments with Sedlaczek's electric locomotive headlight on the Western Railway have been pronounced by the public prints so successful that I beg to transmit herewith a few items in regard thereto, which may prove of interest to our American specialists.

The conception of illuminating the railroad track by means of an electric light attached to the head of the locomotive has long since ceased to be a novelty in railway engineering, while the advantages to be derived therefrom, if successfully accomplished, have furnished sufficient spur to urge inventors to the greatest possible researches and endeavors.

Success, however, has been rendered very difficult from the fact that the oscillations and jars of the engine while in motion soon destroyed the delicate apparatus of the best electric lights known, and that a cheap and convenient method of generating the electric current not immediately dependent on the continuous movement of the locomotive proved difficult to obtain. In 1881 Mr. Sedlaczek, chief of the telegraphic service at Leoben, in Austria, aided by Mr. Schuckert, of Nuremberg, after six years of trial succeeded in obtaining, it is affirmed, these two great desiderata, first by adopting as generator a Gramme machine with a Brotherhood motor furnished with an automatic regulator, having likewise attached thereto a Schuckert dynamo-electric machine. To obtain sufficient current required from 700 to 800 revolutions of the electric motor, demanding about 3 horse-power, being less than 2 per cent. of the force of the locomotive; and, second, the light was procured by a Sedlaczek lamp, invented specially for the purpose, having a force of 500 carcel jets. The electric machine was placed on the boiler, just behind the smokestack, and brought under the immediate control of the engineer.

The first experiments took place in September of 1881, between Leoben and Judenburg, on the "Kronprinz-Rudolf Bahn," a distance of 50 kilometers, with great success, it is affirmed; to the end that the road for a kilometer before the locomotive was rendered light as day. The white signals were marvelously brought out upon the black background, and the lamps and lights appeared like yellowish points. The same experiments tried last October between Munich and Diesenhofen, of the Munich-Salzburg line, resulted in even greater success, as may be seen from the official certificate of the president and secretary of the commission of experts named by the Munich Electric Exhibition, a copy of whose translation accompanies this communication.

Another opportunity of examination and experimentation will be afforded, doubtless, at the coming International Electric Exhibition which opens at Vienna on the 1st of September next.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, May 19, 1883.

[Translation of an article appearing in the "Centralblatt fur Eirenbaknen and Dampfschiffarth," Vienna, April 12, 1883.]

ABOUT ELECTRIC LOCOMOTIVE HEADLIGHTS.

(Certificate for Mr. Herrman Sedlaczek, engineer, of Vienna.)

In the evening of October 4, 1882, between six and nine o'clock, a trial was made on the part of the railroad Munich-Deisenhofen (line from Munich to Salzburg) of the locomotive head-light exhibited by Schuckert, on the system Sedlaczek.

The sky during the time the trial took place was completely overcast with clouds in such manner that the light of the lamp received no support from the moon or the stars; on the contrary, it is to be supposed that the rain which set in during the trial somewhat lessened the effect of brilliancy.

The locomotive lamp burned with perfect uniformity; disturbances caused by the swaying to and fro of the locomotive could not be noticed. When on a curve the lamp turned of its own accord, thereby lighting the track just as effectually as on a straight line.

Objects in immediate proximity to the road, as well as the different colors and forms of the signals, could be plainly distinguished from the locomotive at a distance of 250 meters; at a distance above 250 meters the road was still sufficiently illuminated to recognize greater objects on the road.

On passing stations the position of the switches could be easily seen. At a distance of 250 meters from the lamp small print could be read without difficulty; at that distance, about 15 meters along side both tracks of the road were yet lighted.

At a distance of 1,500 meters from the locomotive head-light a drawing on white paper could still be seen, while without that light there was perfect darkness.

The electric light of the lamp is visible at a distance of at least four kilometers.

The board of examiners for electro-technical trials at the Royal Crystal Palace in Munich:

The secretary:
OSKAR V. MEELLER.
The president: DR. v. BEETZ.

SHIPBUILDING IN LEITH.

REPORT BY CONSUL LEONARD.

The shipbuilding industry in this district, correspondingly with trade in general, has made satisfactory progress during the past twelve months.

In the course of the year 1882 thirteen iron vessels, mostly of large tonnage, have been launched at Leith. Nine of these vessels were built by Messrs. Ramage & Ferguson, consisting of four screw steamers, one sailing bark, and four steam yachts, with a total tonnage of 12,100.

In the engineering works recently erected by that firm there are at present six sets of compound engines being made.

Three screw-steamers, aggregating 4,050 tons, were launched by Messrs. Morton & Co.

Morton & Co. also fitted engines and boilers of 150 horse-power, nominal, on board the steamship Zakynthos, built at Sunderland, and they overhauled and repaired a number of vessels.

The iron shipbuilding trade generally is assuming greater proportions year by year, and at the present time the two firms above named have contracts which will keep them busy for more than twelve months to come.

Hawthorn & Co. have hitherto confined their attention chiefly to engine and boiler making and to the repairing of vessels, but they have occasionally launched a small steamer or lighter, and have now made arrangements for increasing their shipbuilding business. That firm launched one steamer lately of about 100 tons for the coasting trade, and they have two iron steam trawlers in course of construction for the Forth Steam Fishing Company.

A steam trawler was also launched by Messrs. Gifford & Co. in the past year.

Since this branch of the shipbuilding industry was commenced, a few years ago, upwards of fifteen steam trawlers have been built in Leith. The most of these were built by D. Allen & Co., who have now removed to Granton, a port in this district situated about one mile and a half west from Leith.

Several steam launches have been constructed by John Cran & Co., of Leith, and other boat-building firms have built smaller craft.

J. A. LEONARD,
Consul.

UNITED STATES CONSULATE,
Leith, March 13, 1883.

STRAW GOODS TRADE OF ITALY.

REPORT BY CONSUL WELSH, OF FLORENCE.

I have the honor to submit herewith a report on the straw goods' trade between this consular district and the United States.

Places of production.—In the city of Florence there is a market for straw goods made by hand by female residents of surrounding places, such as Fiesole, Brozzi, Signa, Prato, &c. Most of the straw merchants are established at Florence, but workshops are not to be found in the city, with the exception of those for preparing, casing, and baling goods to be shipped. Ancona and Carpi are likewise places of production, but such productions are under the control of Florentine merchants.

Price of goods.—The price of straw hats and braids depends much upon the fashion and the season of the year, winter being the marketable season; also, upon the number of straw threads used in making up, and if they are bleached or unbleached, colored or not, &c.

Straw goods are all invoiced at the *actual market value*, they being all on consignment for sale. It is to be understood, however, that there is not a proper market in which prices for the various kinds of braids on hats are quoted, and consequently not even the local Royal Chamber of Commerce, which superintends the trade of this province, can keep any record whatever of the straw trade. The prices are subject principally to the quotations of the New York market and the importance of orders received.

It is utterly impossible to give the exact market value at which straw hats and braids are invoiced, owing to the fluctuation of prices and the difference of quotations among the various places. Moreover the nomenclature of goods varies so much that every week merchants bring in a new name for braids and hats, which may differ but very slightly from the kinds made for years.

Goods are generally ordered by cable or letter merely by a number, each number indicating the style of straw or hat wished for—each number having a corresponding one in the sample book of the merchant· Straw braids are made in pieces and measure sometimes from 45 to 48 meters, and in other instances from 48 to 52 yards.

Packing.—Straw braids and common or unfinished hats are baled and the bales cost about the sum of $1.50. Straw hats, finished, are put in cases containing several hundred dozens, the cases costing from $1.75 to $2 each. Fashionable hats for ladies are carefully packed in boxes, which cost from 50 to 75 cents.

Folding, &c.—Prior to the packing of braids and hats, they are carefully selected and folded, for which operation merchants usually charge one-fifth of a cent per each piece of braid or one cent per dozen of hats.

These charges are regularly detailed in the invoices after the description of goods, although a few merchants make their invoices in sum total and then write over: "In the above prices are included all charges."

Places of shipment.—Straw goods are generally shipped by rail to Havre, by slow or fast conveyance according to orders. One or two firms only have their goods forwarded for shipment at Antwerp. Those merchants who ship via Leghorn avail themselves of the "Anchor Line" of steamers, which is the cheapest route. Straw goods are not now shipped in sailing vessels.

Freight.—Via Leghorn straw goods are charged 20*s.* to 24*s.* and 15 per cent. primage per ton of 40 cubic feet.

From Havre to New York freight charges vary from 10*s.* to 15*s.* per cubic meter, whilst from Florence to Havre by rail the freight is levied on weight at the rate of about $5 per 100 kilograms (220 pounds) by slow conveyance, and of about $9 by fast conveyance, plus 50 per cent. on usual freight charges for merchandise declared to be voluminous, viz, not exceeding 150 kilograms (330 pounds) in the volume of a cubic meter.

Shipments made by way of Leghorn are always invoiced free on board of steamers, but for any foreign port charges are forwarded from the Florence depot.

Commission.—No commission is charged upon goods sent for sale in the general way, but upon orders received and for articles purchased out of their own production. Tuscan merchants charge a commission ranging from 2½ to 5 per cent., which former is the most usual rate.

Discount.—Sometimes invoices are made out with a discount averaging from 2 to 2½ per cent. That discount refers only to goods produced and shipped as stock, or to goods of inferior quality.

Discount and commissions are, however, exceptional, and charged but by a limited number of firms.

Bills of sale or exchange.—In a few cases straw merchants draw through local bankers against consular invoice and bill of lading, one-third of amount of invoice being advanced them in cash; but this custom, having been productive of loss to bankers, is being gradually discontinued.

The majority have an account with their consignees, who make remittances to them by drafts at 60 days' sight on Paris or London, according to the amount of sales, commissions, &c., being previously deducted.

Consignees.—Shipments of straw goods are made to the following firms, viz: Weekly to Nos. 1, 2, 3; every fortnight to Nos. 4, 5, 6; and monthly to the others.

1. I. S. Plummer & Co.
2. Latimer, Bailey & Co.
3. Alfred Bernau.
4. H. Weckherlin.
5. J. Zimmerman & Co.
6. Kurtz, Stuboeck & Co.
7. Rowe & Bro.
8. Ladstatter & Menkhoff.
9. J. E. Glogguez.
10. I. W. Stephenson.

Manufacturers and shippers.—The following is the list of leading owners and manufacturers of straw goods who correspond directly or are to some extent interested with New York firms, viz:

No.	Name.	Nationality.	Locality.
1	Baur & Zimmerman	Swiss	Florence.
2	Alfred Barnard	American	Do.
3	M. Bruzzisser & Co	Swiss	Do.
4	R. A. Burgisser	Swiss	Do.
5	Cajoli Benucci & Co	Italian	Do.
6	L. Conli & Co	Italian	Do.
7	E. Falini & Co	Italian	Prato.
8	Filippo Gandolfi	Italian	Carpi.
9	Gieuseppe Gozzini	Italian	Florence.
10	I. T. Kubli	Swiss	Do.
11	P. Ladstatter & Son	German	Do.
12	Ubaldo Mannozzi	Italian	Do.
13	Cesare Marchini	Italian	Fiesole.
14	Eredi J. Menotti	Italian	Carpi.
15	Santini Bros	Italian	Sigmo.
16	Gemmow Scaffai	Italian	Sigmo.
17	A. Weber	Swiss	Florence.

Straw merchants keep their own counsel, and are exceedingly jealous of their fellows in business transactions.

The largest exporters are producers themselves, and have therefore one price; others who do not keep workshops, and buy from the *fattorini* (agents who supply the straw to work-women, and afterwards the made-up goods to shippers), charge somewhat higher prices.

Should merchants be compelled to produce at the consulate, with every invoice, samples of goods shipped, a control could hardly be established in regard to quality and prices without inspecting the entire shipment.

The trade is in the hands of a few, and I may add that, although the exports of straw from the district to the United States steadily increase, the *number* of invoices are decreasing, owing to the larger merchants controlling the exports of the smaller ones. This of course decreases the income of the consulate, but increases the receipts at the port of entry.

I think there is less attention given to the manufacture of hats than in former times, as the *home* manufacturers prefer to import braids and make their hats as fashion may indicate a ready sale.

I beg to add that very fine hats, which are the admiration of all visiting Tuscany, meet with a very difficult sale, owing to their high prices.

Since my arrival in Florence I felt it my duty to make myself fully acquainted with the various kinds of goods which constitute the trade of this district with the United States, and straw being almost the only important branch of trade between Tuscany and the United States, I beg to forward this report.

WM. L. WELSH,
Consul.

UNITED STATES CONSULATE,
Florence, Italy, March 21, 1883.

SPANISH LAW ON BOTTOMRY BONDS.

REPORT BY CONSUL MARSTON, OF MALAGA.

I have the honor to communicate with the Department of State upon the interesting subject of the Spanish law regarding the collection of a bottomry bond made by the captain of a foreign vessel in foreign territory made payable in a Spanish port.

The German bark Emilie arrived in Malaga last month under the following circumstances:

The vessel sailed from Newcastle, England, with a cargo of coals for Malaga, Spain, but, through stress of weather, she was forced into Grimsby for repairs; the captain, being compelled to raise money on bottomry, received about 20,000 francs from a French firm; the bond was made payable three days after the vessel's safe arrival at this port. Accordingly the papers were forwarded here for collection. On their arrival at Malaga the captain simply said he had no money, but they could proceed legally against the vessel; this they learned, according to Spanish law, could not be done.

[Extract from Spanish Commercial Code, Article No. 605.—Translation.]

Foreign vessels anchoring in Spanish ports cannot be seized or attached for debts, unless incurred by them in Spanish territory and for their own benefit.

Thus the owners of this bond are compelled to negotiate for a compromise, the Spanish law refusing to permit the collection of a just debt, incurred by a captain of a distressed vessel, who finds himself in a foreign port, and who applies for funds on bottomry to enable him to reach his destination to which his cargo has been shipped and for which the vessel cleared.

I report upon this subject, as I consider it rather a novel law—I believe particularly Spanish—and do not think its existence is generally known; further, it is a law likely to prove a hardship to those innocent of its existence, who lend their money in bottomry to vessels bound to Spanish ports.

The compromise upon this bond has finally been adjusted between the representative of the owners of the bond, who is now in Malaga, and the captain of the vessel, for the amount of 7,500 francs, one half to be paid in cash, the balance to be secured upon the outward cargo of a charter she has obtained in Malaga; thus the holders of the bottomry bond lose about 12,500 francs on the transaction.

H. C. MARSTON,
Consul.

UNITED STATES CONSULATE,
Malaga, Spain, June 16, 1883.

CROPS AND FLOUR MILLS OF HUNGARY.

REPORT BY CONSUL STERNE, OF BUDA-PESTH.

In noticing the fact that the export of American flour is yearly assuming larger proportions, it will be of interest to that particular branch of trade in the United States to know that also here in Hungary the milling business is gradually expanding, last year's production of flour being the largest on record; the exceptionally large crop of 1882 being, of course, a main factor to that result. As a consequence the mills, nearly all of which are stock companies, have lately paid very good dividends, and at present there is every prospect that 1883 will also become a very profitable year to them; for notwithstanding the many rumors of damage to the growing crops, I am convinced that the result of the coming harvest will be very satisfactory to Hungary. Indeed, at one time this spring the prospects warranted hopes for even a larger yield than 1882, but the cold and wet month of May has no doubt caused some damage and reduced the prospect.

It is very difficult here to obtain practical statistics as a basis for crop reports, for the official estimates are not made by the government as in the United States, and private information must be taken with great caution, since here the producer of and dealer in grain are more closely connected than elsewhere, many of the largest farmers being also dealers, who frequently circulate false rumors for purposes of speculation, and nearly always in the interest of hausse or advancing prices.

The following is a statistical report by the Chamber of Commerce on the quantity of flour produced by the eleven mills of Buda-Pesth during the years indicated:

	Cwt.
1870	5,000,000
1871	5,700,000
1872	4,900,000
1873	4,850,000
1874	4,500,000
1880	6,270,000
1881	6,800,000
1882	8,000,000

The years from 1874–1880 are not reported, but the product in said years is said to have gradually increased again.

These mills have consumed 13,700,000, 15,230,000 and 17,700,000 bushels of various kinds of grain during the years 1880, 1881, and 1882 respectively.

During the same years 1,700,000, 2,000,000, and 2,300,000 cwt. of bran was produced.

Roumania is the only foreign state which furnishes any part of the raw material used here, the convenient water-route of the Danube making such import practicable; all the remainder of the grain (and some to spare) is produced at home.

There are other large mills scattered over the state, but I have especially mentioned those of Buda-Pesth because they are more exclusively working for the export trade, and are therefore of more direct importance to their competitors in the United States.

It is claimed that the good result of the past year is largely due to the completion of an arrangement amongst the mills which does away with the unreasonable and killing competition formerly practiced in grain buying; and it must be admitted that in a technical way also these establishments leave nothing undone to enable them to maintain their reputation for a superior quality of flour. Several mills are introducing the electric light as a safeguard against dust explosions and fire.

This industry is further considered of such importance to the State that, as such, it grants these establishments every facility in its power, the most effective being cheap freights on those railroads which are owned or controlled by the State.

Nearly all of the flour exported goes via the southern railroad to Fiume, and by this means this Hungarian port is also helped greatly in its development.

To close, I will say that about 25 per cent. of the product is exported, the principal customers being, first of all, England, which takes specially the finer grades, then France, Germany, Switzerland, Belgium, Holland, and Brazil. Also the manufacturing districts of the neighboring Bohemia are customers, mostly of the more common sort.

HENRY STERNE,
Consul.

UNITED STATES CONSULATE.
Buda-Pesth, *June* 14, 1883.

CUTLERY INDUSTRY OF SHEFFIELD.

REPORT BY CONSUL WEBSTER.

I have the honor to submit herewith a supplement to my report of September 26, 1882, upon the Sheffield cutlery industry.*

IVORY.

That report related especially to ivory as, next to steel, the most important material used in the manufacture of cutlery. It mentioned the scarcity of ivory and the greatly advanced prices. Since that date ivory has arrived in larger quantities, but the high prices continue. At the first Liverpool sale this year, 50 tons were disposed of, the largest quantity ever offered at one sale.

---

* Published in No. 25, November, 1882.

The best qualities of West African brought at the rate of $5,350 per ton. The same could have been bought three years ago for one-half that price.

It is said that much ivory that formerly came to this country is now going direct to the Continent and to the United States.

When once the current of trade is turned, England will not be so exclusively the market for this valuable material, and others, as she has been for so many years.

HORN.

Next to ivory in value to the cutlery manufacturer is horn, in its many varieties. Indeed, considering the much greater quantity used and its superiority for many purposes, horn may almost be said to stand before even ivory in importance to the cutler. This is true especially of stag and buck horn. It is more durable and supplies a want to vastly greater numbers of people than ivory, which is an article of luxury.

The varieties are stag and buck horn, East Indian buffalo, cow, ox, and ram's horn. The horns of the American bison come occasionally in small quantities to this market. (What becomes of all the bison horns?) The whole world is ransacked to supply Sheffield with this useful material. The following table shows the quantities of horns and hoofs imported into Great Britain during the year 1880, their values, and the countries from which they come:

Whence.	Quantity.	Value.
	Tons.	
France	572	$101, 033
United States	680	48, 893
Brazil	268	47, 681
Uraguay	199	34, 479
Argentine Republic	238	33, 758
British Possessions in Africa	192	47, 871
Bombay	492	102, 692
Madras	210	46, 523
Bengal and Burmah	1, 130	219, 766
Straits Settlements	492	107, 505
Ceylon	105	26, 206
Australia	611	93, 358
Other countries	577	82, 493
Total	5, 764	982, 258

To the above may be added the quantity gathered from all parts of Great Britain. There is no means of learning this with exactness, as it is not given in the Government returns. Good judges, those extensively engaged in the trade, estimate it at 600 tons, valued at $98,000, making the total value, in round numbers, $1,080,258 for the year 1880. The native horns and bones are considered to be far inferior to the imported.

Sales are held every three months at London and Liverpool, and are attended, like those of ivory, by foreign buyers. Much the greater part of all horns imported into this country are used in Sheffield. Prices are advancing.

By comparing values in the foregoing table it will be seen that horns from France are of more than double the value per ton of horns from the United States. This great difference may be explained by the fact that French horns, so called, are imported into France from South America, and the French buyers, after cutting off the hollow portion of the horn, to be used in the manufacture of combs, send the tips, the solid and most valuable portion, to England, where they bring much higher prices than the whole horns would do. These tips come almost exclusively to Sheffield.

The Australian and the Cape horns, the latter so called because they are shipped from the Cape of Good Hope, are the most valuable of all horns of neat cattle. Their value consists in their greater size and solidity, both owing to the fact that the cattle are allowed to attain a more mature age before being slaughtered. The Cape horns are valuable also for their beautiful mottled color when polished. The horns of neat cattle rank in value in the following order: Cape, Australian, called also Sidney, South American.

The Australian are more laminate, and consequently well adapted to the manufacture of combs. Comb-making was formerly a very flourishing Sheffield industry that required large quantities of both horn and tortoise shell. The trade has of late greatly declined, the makers not being able to compete with Scotch and Continental manufacturers.

The buffalo horn from the East Indies is of two colors, black and gray. The black is most valuable. Its price is much higher than that of any other variety of horn, being now from $225 to $325 per ton. It is shipped to England from Calcutta, Bombay, and Madras. The largest are from Siam. The animal is becoming more scarce, and the price is also enhanced by the use of the largest varieties in France and Germany in the manufacture of a substitute for whalebone.

Reindeer horns are brought from Lapland and Siberia in large quantities. The largest stag horns come from the East Indies and China. Many specimens of these antlers are so noble and beautiful that it causes a pang to see them given to the saw of the cutter, the more so because they are becoming annually more scarce. The best are now selling for $600 per ton. Time was when they could be bought for $50 to $100.

Though horn is principally used in the manufacture of cutlery, it is also employed in the production of a great variety of other articles, being turned or pressed into handles for walking-sticks, umbrellas, and parasols, tea and coffee pots, bicycles, sewing-machines, cork-screws, and machetes; for whistles, combs, lantern sides, buttons, brooches, bracelets, fancy buckles, clasps, drawer and door knobs, finger plates, drinking cups, spoons, and "pearls." Pearls are the small pieces inserted into metal handles of tea and coffee pots as non-conductors of heat. Machetes are large, heavy knives for cutting sugar-cane.

The articles for personal ornaments are dyed black, and the best qualities almost rival the Whitby jet.

Of the total amount imported under the head of horns and hoofs, not more than one-quarter are hoofs. These are mostly consumed in the making of fertilizers, but considerable quantities are used for making a cheap grade of razor and knife scales and brooches, being dyed and pressed in hot molds. The sawdust, shavings, and other waste is sold for fertilizing purposes, and for making prussiate of potash for fixing dyes. It is worth from $30 to $50 per ton.

BONES.

Of this material, so very useful in the cutlery industry, there were imported into Great Britain, during the year 1880, 89,419 tons from the same countries that supply the world with horns, with the addition of Italy, Turkey, and Morocco.

South America contributes a large proportion, Brazil sending 9,589 tons, Uruguay 8,778, and the Argentine Republic 23,644. None are set down in the British returns as coming from Mexico, although "other countries" not named are credited with 13,140 tons.

The total amount of bones, horns, and hoofs imported into Great Britain from South America during the year 1880 was 43,349 tons, at a value of $1,246,987. The question arises whether, with increased facilities for transportation between South and North America, a large portion of this material might not find its way to the United States, and thus New York become the chief distributing center.

The United States furnishes Great Britain annually with about $100,000 worth of bones, horns, and hoofs. A portion of this is returned to the United States in scales for the American cutlers, and more than the remainder in the finished cutlery from Sheffield.

Of the whole importation of bones into Great Britain in 1880, 78,138 tons were made into fertilizers, and 11,311 tons were used for manufacturing purposes, chiefly by Sheffield cutlers.

The shank bones of oxen are almost exclusively used for this purpose, 2,000,000 being required annually by the cutlery trade. The best, both for size and fine quality, are the Australian, for the reason, as with horns, that in that country the animals attain greater age. The best qualities are so good as to be mistaken for ivory by the inexperienced eye.

The United States bones, which here are called Boston bones, have a good reputation as having been well cared for.

The South American are said to be often injured by blood-stains and exposure, and by having been cleaned with lime.

A shipment of bone scales and handles has recently arrived in Sheffield from the United States, a very unusual occurrence, as the course of this trade has always been in the opposite direction. I hear that they were not sold at a good profit; their quality was not the objection to them, but the manner in which they were cut. It would seem that the time would soon come when none of the above-named materials could be spared from the expanding manufactures of our own country. This opinion is expressed by a member of a large, and perhaps the oldest firm, of horn and bone merchants in Sheffield, who has recently made a business tour in the United States. The firm is that of William Fisher & Sons, which has occupied its present premises for two hundred years.

MOTHER-OF-PEARL.

This valuable material is very largely in demand by Sheffield cutlers. From this center it is distributed over the world in articles of luxury and beauty, principally in the form of scales, and solid handles for expensive sets of dessert, tea, and dining knives. The cutting of pearl shell and the ornamental carving is a business by itself, and is in few hands. Manufacturers of cutlery do not purchase and cut their own pearl as they sometimes do with ivory. They order from the pearl-cutters as they may require. This necessitates the keeping of large stocks on hand. A large dealer may often have in his warehouse pearl in the rough and finished state to the value of $50,000. The sources of supply are Manila, Singapore, Australia, Bombay, and Ceylon. Ceylon and the Coromandel coast are among the most famous of the pearl-fisheries. The Manila is the most valuable, as it possesses most of the opalescence that gives to pearl its peculiar beauty. The Bombay and Australian varieties are whiter, and are chiefly used by button-makers.

London is the port to which this shell is brought. Auction sales are held there as often as every two months, and are attended by buyers from France and Germany. The amounts thus sold during the last five years are as follows:

	Cwts.
1882	27,116
1881	31,136
1880	23,268
1879	20,787
1878	25,789

A very large proportion, and of the best quality, comes to Sheffield. Prices have advanced about one-third during the last twelve months.

Good qualities now command $12.50 per ton. The best and thickest pieces, 4 inches long, suitable for dining knives, are worth in the rough $15 to $20 per dozen; for dessert handles, $12 to $15. Handles of extra size will cost $2 to $4 each. The shaping, carving, and polishing will add $2 to $5, or more, to the cost per dozen, according to the amount of carving. Only one handle, the best, can be cut from a single shell, and not more than one shell in thirty will yield even one. Shells of large size, 16 inches across, are sometimes found, but they are becoming rare. Very small shells are called "chickens." Poor qualities of shell are denoted by the terms "grubby," "dead," and "blistered." The grubby shell is perforated by innumerable small holes, the work of a grub or borer. It is nearly useless for any manufacturing purpose. These shells are usually old, large, and strongly marked. They are of late turned to account by artists, who disguise their imperfections and skillfully use the natural marks of the shell to heighten the beauty of the picture they paint upon it. The blistered shell is rendered almost worthless by black blisters. These blisters, the work also of the grub, are sometimes the nests of precious pearls. I have seen a large pearl recently found by a Sheffield shell-cutter, for which he has refused an offer of 50 guineas. It is divisible into three, the largest pear-shaped, seven-eighths of an inch long, the other being of the size of very large peas. Another fortunate pearl-cutter here found, a few years since, a pearl that was described to me by the son of the finder as of the size of a large-sized canary egg. It was hidden in a black blister, and was itself covered with a hard, black coat; this being removed, a pearl of great beauty was revealed. It was sold for 55 guineas, which was probably much less than its value. It is now in the necklace of the Princess Royal of Prussia. Such discoveries are very rare. It is seldom that precious pearls of any value escape the close scrutiny of the practiced eyes of the owners who receive the shells when brought up by the divers.

Nearly 50 per cent. of the shell that is cut in Sheffield is sent abroad to foreign cutlery-makers. A cutter informs me that he is now executing an order for 16,430 dozen scales for Germany, an indication that Germany is competing with Sheffield in the cutlery trade. After the cutler has taken from the shell all that can serve his purpose, about 40 per cent. remains. This is sold to button-makers for $10 to $20 per hundred-weight. The cutting is done by saws running in water, to prevent heating and cracking the shell.

TORTOISE-SHELL.

The sources of supply are the East and West Indies. It is shipped to London from Singapore, Manila, Bombay, Zanzibar, Sydney, Honduras, and Nassau. The Manila shell is the most beautiful in color and is most sought by the Sheffield cutlers. The West Indian has the greatest thickness, and is bought by comb makers. Sales are held exclusively in London every two months.

The following table gives the amounts sold during the last five years:

	Cwts.
1882	719
1881	647
1880	465
1879	530
1878	650

Sheffield takes about two-thirds of the whole amount. The price ranges from $4.50 to $7 a pound. Exceptionally fine shell, selected from a large amount, will sometimes bring $20 a pound. The import trade is in the hands of a few persons, principally Jews. The price is determined by the beauty of the color and by the thickness. The very thin shell is used for veneering wood scales for pocket-knives, boxes, hair-brushes, tea-caddies, and other ornamental work. The waste is sold for similar purposes, the pieces being softened by heat and run together.

THE CUTLERY INDUSTRY OF THE FUTURE.

Besides the materials above described there are used in the cutlery trade, for knife-handles, various foreign woods and compound substances that bear the names vulcanite, xylonite, ebonite, &c. On account of the high prices of ivory, horn, and other material, these patent substances are assuming importance and are coming more and more into use. The quality of this class of material made here is inferior to that made in the United States. It would seem that it is to the improvement of this kind of material that the cutlery industry is to look in the future for a substitute for ivory and certain varieties of horn that are so rapidly becoming scarce and expensive.

England has for centuries controlled the great ivory, horn, and shell trade of the world. Sheffield with her superior steel and these valuable materials has held in her hand the immense cutlery industry. A change is going on. England does not control so exclusively as she once did these great branches of trade.

Sheffield has now, besides our own country, a competitor in Germany. Every year thousands of dozens of razors are sent from Sheffield to Germany to be hollow-ground, returned to Sheffield to be completed, and then sent to the United States. Large quantities are also sent to the United States to be ground there. That the German grinding has a reputation for excellence is proved by the fact that Sheffield makers stamp upon their razors the legend, "Ground in Hamburg," "Ground as in Hamburg."

A razor manufacturer who is in the American trade tells me that he could take orders for six times the amount of hollow-ground razors that he now does if he could get the grinding done. Others make similar statements. Why is it that in this, the very home of the cutlery industry, manufacturers are thus placed at a disadvantage and made dependent upon foreign workmen? Here are the men capable of doing the work—men who can easily earn their $20 a week by working only three or four days, and who could earn a proportionately larger amount if they would. Here is the work pressing to be done. Here are the employers who would be glad to pay for it. Sheffield grinders will never confess that they do not possess the requisite skill. Indeed, several of the largest manufacturers employ only Sheffield grinders, and their work commends itself to customers all the world over. What, then, is the trouble? It is largely, perhaps not wholly, the loss of power, time, and skill consequent upon the drinking habits of the workmen. Sheffield grinders are no worse in this particular than other classes of working men. They all keep too faithfully Saint Monday's and Saint Tuesday's at the beer houses that tempt them on every corner. Herein lies the danger to Sheffield trades that require any but the roughest labor. The process of razor-grinding requires great care, delicacy of touch, and steady nerves. These are qualities that do not flourish in connection with hard drinking. There are signs of hope for the future in the great advance in the last ten years of temperance sentiment and practice, not only among the working people but the influential classes of England.

In these days of advancing intelligence, of new methods and inventions, and severe competition, the best will win. That country that has not only the best machinery but the steadiest nerves behind it, the clearest headed and the most temperate workmen, will take the front rank in the world's rapidly expanding industries. In no other way can ancient supremacy be maintained or a new advance be made.

C. B. WEBSTER,
Consul.

CONSULATE OF THE UNITED STATES,
Sheffield, March 8, 1883.

DAIRY EXPERIMENTS IN DENMARK.

REPORT BY CONSUL RIDER, OF COPENHAGEN.

I have the honor to transmit subjoined a report of a lecture on experiments in dairy thrift delivered at the Royal Danish Agricultural Society, by Professor Fjord, on the 18th instant. It is to be observed that the experiments were made by experienced Government officers and are entirely new. I am therefore of opinion that they will benefit and interest our dairy people.

The lecture in question is a continuation of my reports on the same subject for the past five years, and treats upon the renewed experiments over the yield of butter from the various dairy systems, as also on experiments of corresponding nature made with several centrifuges and the different modes of working these.

The first part of the lecture referred to the corresponding experiments in the following different modes of treatment of the milk: Ice, ten hours; tubs, thirty-four hours; water, 10° C. and thirty-four hours; tubs, thirty-four hours, centrifuge and churned milk; all of which were carried out at Ourup farm from April, 1881, to March, 1882, by Inspector Lunde. To all of these experiments there were daily used 609 pounds of sweet milk. All the milk was carefully mixed, and thereafter 50 pounds were served out to each of the ice, water, and tub systems; 9 pounds were put aside for souring for subsequent churning, and 400 pounds were centrifuged in one of the large Danish centrifuges.

There were carried out two lists of experiments, namely, in part with milk from the farm stock and in part with milk bought from the smaller farms. The tub milk all the time was preserved during the thirty-four hours, inasmuch as the floor of the milk chamber even in the hottest summer days was unusually cool, owing to the large quantities of ice used in the dairy at Ourup. In the four summer months the tub milk on an average was 5° C. colder than it had been at Rosenfeldt in the corresponding months of 1879, and the result was thus far more favorable than it would be in a normal tub dairy. It was shown that when the tub milk can be kept perfectly fresh during thirty-four hours the ice system will not yield a larger butter product. In the months of November and December the milk from the farm was very heavy, which corresponded with previous experiments from older cows' milk, while on the other hand the "purchased milk" did not show any great sign of heaviness.

In a list of very interesting tables, the results were shown for each month, both for the milk from the farm as well as for the "bought milk" for all the six systems: namely, how much butter was obtained from one hundred pounds' milk, or how many pounds' milk went to 1 pound of butter, and how much larger percentage of butter the centrifuge gave than the other systems.

I cannot here give all these tables, but confine myself to the following one, showing the average yield of the five systems. The result from the tub system is omitted, owing to the conditions, as above stated, having been more favorable than in an ordinary normal tub dairy:

Pounds of milk to one pound of butter.

Systems.	Milk from farm, ten months.			Bought milk, eleven months.		
	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.
Centrifuge	24.4	23.2	25.8	25.5	22.7	27.8
Milk churning	26.7	25.4	28.2	27.3	24.4	31.2
Ice thirty-four hours	27.5	26.2	29.2	29.2	25.3	31.8
Ice ten hours	29.5	27.6	31.4	31.3	26.7	34.1
Water 10° C. 35 hours	32.4	28.8	35.0	35.6	29.8	40.4

Whilst the average consumption of 27.5 pounds' milk to 1 pound of butter may be considered favorable for an ice dairy, the consumption with the centrifuge is nevertheless 3.1 pounds less. The difference is least in the month of August (2.2 pounds), and greatest in the month of October (3.9 pounds). In the bought milk the proportion is still somewhat more in favor of the centrifuge, namely, 3.7 pounds.

Of special interest was a graphic illustration of the butter yield with the three systems, namely, "centrifuge," milk churning, and ice thirty-four hours (nine months, with tubs the three autumn months). It was there seen that the curving line for milk churning was all the time above the curved lines for ice tubs; but was steadily considerably below that for the centrifuge, and it does not appear as heavy milk or other conditions had at any time of the year interposed any difficulty in the way of producing a good butter yield by milk churning.

The chemical investigations have been carried on in the same manner as on previous occasions.

The lecturer, by means of tables, gave an oversight of these analyses, as well as a comparison of the different special conditions. Thus, one table demonstrated how many pounds were to be found in churned milk, thus showing how thoroughly it had been churned.

When no attention is paid to any occasional day where a proportionally large quantity of fat might be found in the buttermilk from the water and tub samples, which is supposed to be owing either to chance, mishap in churning, or to commencement of sickness in the cream, it is seen that in the buttermilk from the cream of 100 pounds sweet milk were to be found in the different systems an average of 0.6 of fat; and in 100 pounds of buttermilk from thirty-four hours' ice, centrifuge, and churned milk, relatively, 0.42, 0.38, 0.39, that is to say, an astonishing uniformity in the amount of fat; and there is not the slightest reason why the centrifuged cream cannot be churned equally as clean as the other cream samples. But when the buttermilk in such manner has been similarly fat in all the systems, then the greater or less yield of butter from the churning of milk than from the churning of cream in one of the other systems must arise either from a difference in the composition of the butter or because the skimming has not been equally perfect in all the systems. In order to elucidate this matter the lecturer produced a table showing how much water and how much of other substances were to be found in the six different systems in 3 pounds of butter. The result was that on an average there were found 46.48 quints of water and 4.5 quints of other substances, that is to say, a general harmony; that from this cause no grounds could be found for the difference in the butter yield. The assertion which one sometimes hears, that a favorable butter yield from milk churning can be attributed to the amount of cheese matter going over to the butter, is, however, not confirmed by these experiments.

The main cause of the difference in the yields of butter, from the various systems, can, therefore, only be that there has been left behind in the scummed milk a difference in the amount of fatty matter, which is corroborated by the analysis of the fatty substance in scummed milk. In a comparison between "ice thirty-four hours" and centrifuge an average of eight analyses is obtained relatively of 0.53 and 0.11 per cent. of fat, a difference of 0.42, which as nearly as possible answers to a like difference in butter from 100 pounds of milk.

In two experiments made in the months of November and December with milk from older cows there were with "ice thirty-four hours" and with "tubs" retained, respectively, 2.75 and 1.05 per cent. fat in the scummed milk, whilst the centrifuge had only left behind 0.47 per cent. fat. As chief results from the experiments hitherto made the lecturer noticed: (*a*) The Danish large centrifuge had scummed the milk better and still gave a corresponding larger yield of butter than Lehfeldt's self-scumming but non-continuous centrifuge at Rosenfeldt in 1879–1880: (*b*) Milk churning has given a somewhat larger butter yield than the ice and tub systems, but at the same time unmistakably smaller than the centrifuge system: (*c*) Water cooling (water to 10° C) throughout the whole year has given a bad yield, notably small, when the cows were in stable. In an ordinary water dairy, the water, however, during winter, will be colder than 10° C, and the butter yield would, therefore, become favorable.

The succeeding part of the lecture had reference to centrifuge experiments carried on in April–September, 1882, at Ourup farm. These experiments were carried on with the four following centrifuges:

Centrifuges	Contents.	Revolutions per minute.
	Pounds.	
Large Danish	125	1,500
Do	125	1,900
Small Danish	33	2,400
De Laval's	10	6,000

The Danish centrifuges are nearly of one and the same construction, and that of De Laval of the new form and with the alterations which are known from the Malmo (Sweden) Exhibition of last year. All the centrifuges are provided with tell-tales. Notwithstanding that 266 separate centrifugings and 251 churnings have been made, as well as 187 analyses, the lecturer considers it to be necessary that these experiments should still be pursued for some time longer, before the results could be considered sufficiently faithful, and specially that experiments should be continued with older cows' milk. Whilst the lecturer, in consideration of the large number of dairies that have gone over to the centrifuge system, has been induced already to make known the most important ascertained results, he must at the same time caution them against drawing sure conclusions from the experiments, for he reserves to himself the right of amending the opinions here expressed, so far as future experiments might give occasion thereto.

The experiments, first of all, are intended to ascertain how purely the scumming can be effected in the different dairy systems. The sweet milk's fatty amount varies in general between 3 and 4 per cent., and in round numbers can be put at 3.50 per cent. of the milk's weight. In the ice and tub dairies, it may be said to be clean scummed when in the scummed milk there is only to be found 0.5 per cent., or one-seventh thereof, of fatty substance; and with the large Danish centrifuge at Ourup it has reached up to 0.11 per cent., or about one thirty-second of fatty amount in sweet milk.

During the summer several experiments have been made with the small and large Danish centrifuges and here has been obtained an average for both of 0.7 per cent., a minimum respectively of 0.5 and 0.4 per cent; a maximum, respectively, of 0.12 and 0.15 per cent. In some experiments which were carried on in a special manner with a small amount of milk, in November and December, 1881, with milk from old cows, it was shown that the samples only contained 0.05 and 0.02 per cent. fat, and it would therefore appear to be possible to clean scum old cows' milk equally as well as that from young cows, when a proper method is used. The result from these experiments has been that the centrifuges are now become so perfect that there is little probability of their being able to scum more cleanly than has been performed by the two before-mentioned centrifuges.

Professor Fjord's next list of experiments had reference to ordinary scumming, by which is to be understood a working system wherewith the milk is scummed two to three hours after milking time, and with that heat temperature which it then possesses and then gives 18 to 20 per cent. cream.

That which it was desired to prove was how much milk each of the four centrifuges can work up in the hour, when it is required that they should scum equally clean. In a larger table the individual analyses were given and in the following table a review of the different results is given:

Description.	Per cent. fat in scummed milk.			Analyses.
	Average.	Minimum.	Maximum.	
APRIL–JULY, 1882.				
a. Small Danish; average rapidity, 2,410; 1,290 pounds milk in the hour	0.12	0.9	0.15	9
b. De Laval's; average rapidity of four trials, 5,350:				
1,300 pounds milk in the hour	0.18	0.13	0.22	5
2,450 pounds milk in the hour	0.31	0.21	0.39	7
c. Large Danish; average rapidity, 1,490:				
1,490 pounds milk in the hour	0.10	0.8	0.13	10
2,810 pounds milk in the hour	0.18	0.16	0.20	14
d. Large Danish; average rapidity, 1,950:				
1,870 pounds milk in the hour	0.15	0.11	0.17	4
2,280 pounds milk in the hour	0.27	0.21	0.39	8
SEPTEMBER, 1882.				
a. Small Danish; average rapidity, 2,410:				
1,290 pounds milk in the hour	0.12	0.11	0.12	8
2,435 pounds milk in the hour	0.25	0.22	0.28	4
3,580 pounds milk in the hour	0.41	0.88	0.47	4
4,720 pounds milk in the hour	0.71	0.64	0.79	4
b. Large Danish; average rapidity, 1,800:				
1,780 pounds milk in the hour	0.17	0.16	0.19	5
2,158 pounds milk in the hour	0.70	0.58	0.79	5

In the experiments carried on in September it was the wish to obtain so large a flow of sweet milk that the scummed milk could be about equally fat as in an ordinary dairy of the old systems. As it had shown itself to be difficult to keep up an average rapidity with the large Danish centrifuge above 1,900 revolutions, it was reduced to 1,800, and the flow of milk reduced from 870 to 780 pounds. It will be seen that accidental changes either in the milk's power of throwing off cream, or else in the carrying on of the work, has had considerable influence on the clean scumming, according to the flow of sweet milk being greater or lesser. For the three centrifuges for the lowest flow of milk the difference between the minimum and maximum of fat in the scummed milk is but 0.06, 0.05, 0.06, 0.01, and 0.03; that is to say, so slight a variation that it may be attributed to some unnoticed chance, and thus the centrifuges have here worked with great accuracy.

When, however, greater demands are asked of their working powers, great variations are immediately to be noticed in the fat amount, and especially when there takes place a reduction in the rapidity. The small Danish thus gives, with 435 pounds stream as minimum, 0.15 per cent. of fat, but when the rapidity from 2,410 was reduced to 2,257 or 2,287, it gave 0.39 and 0.35, relatively, of fat. The large centrifuge, with a stream of 1,280 pounds, gave a minimum of 0.21 fat, but when the rapidity fell from 1,950 to 1,841, or 1,772, it gave, respectively, 0.39 and 0.36 per cent. fat. Another large Danish centrifuge, with a stream of 1,000 pounds and 1,348 instead of 1,490 revolutions, gave as maximum 0.44 per cent. fat. According to experiments, until July the centrifuges have scummed cleanest in the following order:

Description.	Stream per hour.	Fat in the scummed milk.	Stream per hour.	Fat in the scummed milk.
	Pounds.	*Per cent.*	*Pounds.*	*Per cent.*
Large centrifuge	490	0.10	810	0.18
Small centrifuge	290	0.12	435	0.22
Another large one	870	0.15	1,280	0.27
De Laval's	300	0.18	450	0.31

In September the lowest rate of flow with the large and small centrifuges showed 0.12 and 0.17 per cent. fat, whilst a double stream gave respectively 0.41 and 0.70 per cent. fat, and thus approached to that which, with "ice-cooling of 10 hours," can be reckoned as ordinary for non-heavy milk (0.70 per cent.). The lecturer remarked that the De Laval's centrifuge had not worked so well as had been expected, inasmuch as whilst in two trials made with it last year at Ericksholm it had only left 0.18 and 0.21 per cent. fat, at Ourup farm, with the same stream of milk, it had left 0.31 per cent. fat. By a telltale fastened to the centrifuge it was shown that on an average 5,350 were made instead of 6,000, which may be accounted for in the different belt used, which was of leather; whereas the one used at Ericksholm was of cotton.

The general opinion of the dairies would appear to be less favorable for the newer than for the older form of construction of the De Laval. The manufacturer seems to think that the cause may be attributed to the small opening through which the cream is forced, and which may be stopped up without its being noticed, and he has, therefore, again altered its construction. The lecturer has not yet had an opportunity of trying this new form, but is more inclined to think that the cause of the less favorable result may be owing to the centrifuge falling behind 6,000 revolutions, the least it should have. It has also been observed that one of the large Danish centrifuges has not been able to scum 1,280 pounds fully as clean as another with 810 pounds in the hour, although according to theoretic calculation it should have done so equally as well; but whether this is due to accident or that the theoretical calculation does not hold good, he could not express any decided opinion.

The next experiments related to the influence of the rapidity on the centrifuge's working powers in a given time to clean scum a more or less milk quantity. In the trials carried on in 1879 at Rosenfeldt's with Lehfeldt's self-scumming but non-continuous centrifuge, it was found that the working yield increased in the same proportion as the centrifuge's power, and thus bore itself as the quadrate of rapidity, but the experiments had now to demonstrate if this rule held good for the full continuous centrifuges, which work with considerably greater rapidity and have about five times as large a flow of sweet milk. In June and July there were, therefore, carried out three lists of experiments with the small Danish, each embracing three days, with 1,450 pounds milk daily, divided in the three trials into 300, 450, and 700 pounds, and with a rapidity of respectively 1,950, 2,400, and 3,000 revolutions per minute. If the before-mentioned rule be correct, then the butter yield should be one and the same, and the scummed milk, equally fat, just the same, whether 450 pounds milk per hour were scummed with a velocity of 2,400, or if 297 pounds were scummed with a velocity of 1,950, or, again, if 703 pounds milk were scummed with a velocity of 3,000. From the tables produced, it was shown that in the experiments a butter weight was obtained from 100 pounds milk, respectively, of 3.75, 3.74, and 3.70 pounds, and that in the scummed milk in the experiments in June (when the analyses were made of all the milk) were found respectively 0.21, 0.22, and 0.28 per cent. fat, and in the experiments of July were found respectively 0.23, 0.23, and 0.22 per cent. of fat. These figures so nearly agree that they confirm the calculation that the centrifuge's power of separating the cream from the milk, at least very closely, increases or diminishes in the same proportion as the quadrate of velocity. The experiments have also shown that with greater velocity an accidental loss of velocity more easily occurs, and that such fallings off can operate disturbingly on the average results, as the increase in the fat of the scummed milk, which manifests itself with smaller velocity, is not made up by the decrease which is produced in another with increased velocity.

Experiments have likewise been made with milk which has been allowed to stand over night. In many centrifuge dairies it is not an uncommon thing that the evening's milk stands over night in water and is centrifuged the following morning, partly without and partly after having been warmed up.

During previous experiments it was shown that milk after a prior cooling was less liable to throw off its cream and become "cold-heavy," but that on being heated up to 40° C. it again recovered its original powers for throwing off the cream. The former experiments, with the milk again warmed up, were made only with that from ice cooling, and the lecturer has made some fresh experiments, in which the small Danish centrifuge was employed. On the 19–22 of June, 1,350 pounds evening's milk were mixed, which were divided into three equal parts of 450 pounds, of which the flow should be of 450 pounds per hour for all the trials. One of the samples was centrifuged immediately and the two others which remained over night in water of about 11° C. were centrifuged the following morning, the one cold, the other having been previously warmed up 40° C.

The separated cream was collected in tin pans of 50 pounds, which were placed in ice for several hours until the cream was again warmed for souring. The 26–28 of June the experiments were renewed; but only with 300 pounds in each trial and with a flow of about 300 pounds per hour, and in addition the cream from the warmed-up samples was immediately cooled by being at once put into a pan placed in ice.

From the tables over these experiments, it appears that from 100 pounds milk were obtained with the first experiments (with a stream of 450 pounds from immediately churned milk) 3.72 pounds of butter, and from the following morning's cold churned milk 3.41 pounds, and from the warmed up milk 3.51 pounds. In the next experiment (with a stream of 300 pounds) the figures show an average respectively of 3.72, 3.57, and 3.67 pounds butter.

In the scummed milk there was found in the first experiment with the immediately centrifuged milk 0.20 per cent. fat; with the following morning's centrifuged cold milk 0.49 per cent., and with the warmed up milk 0.20 per cent. fat; whilst the figures in the other lists of experiments were respectively 0.09, 0.23, and 0.10 per cent. fat.

From the figures for fat in scummed milk it is thus manifest that the sample "immediately" and the sample of "warmed up" are scummed equally clean, whereas the sample of "cold" is not so cleanly scummed, inasmuch as compared with the immediately centrifuged sample in the first experiments it has given 0.31 pounds less butter, and its scummed milk contained 0.29 per cent. more fat.

These figures answer to each other and thus show that the cause of the smaller yield of butter is owing to the cold sample having been scummed less thoroughly. In making a comparison between the sample "immediately" and of the next morning's warmed up milk it is seen that they were scummed equally clean, but nevertheless in the experiment with a flow of 450 pounds there is a difference of 0.21 pounds butter, the cause of which may perhaps be due to the cream from the warmed up milk not having been sufficiently cleanly churned. There was found on all the three days "cheese in the cream" in the warmed up, but not in the other samples, and thus the warming up not only did not produce the expected butter yield, but was the cause of another failing which can reduce the quality of the butter very considerably.

In the second list of experiments, where the cream from the warmed up sample was immediately cooled, it did not show any sign of "cheese in the cream", and the only difference in the butter yield of the sample "immediately" was but of five quints. This is in accordance with previous observations, and it would therefore appear that the warming up of milk which has laid stored over night can be unfavorable, and that a speedy cooling of the cream after centrifuging can in many cases be of consequence.

In the experiments of the 20th June, with a flow of 300 pounds, there was 0.23 per cent. in the scummed milk from the cold sample, which about answers to what there usually is when the flow of newly milked milk is 450 pounds. It would therefore appear that when the flow is reduced by one-third, the cold heavy milk may be scummed equally as clean as the newly milked. In order to investigate this more closely, as also to ascertain if it was of any importance that the cream from the milk which has been allowed to lay the over night ought to be scummed previous to centrifuging, the following experiments were made in September: 450 pounds sweet milk were centrifuged in the evening with a flow of 450 pounds, whilst two other samples, each of 300 pounds lay stored over night in water and were centrifuged next morning with a flow of 300 pounds per hour, the one after having been previously hand-scummed. The result was that both the butter yield and the fat in the scummed milk was almost the same for all the three samples, and there is therefore good ground for concluding that the milk cooled in water in the night to 10-11°C. can be centrifuged nearly as well in its cold state, as the same milk immediately after milking when the flow in the morning is one-third less than in the evening.

From the before mentioned experiments the lecturer produced the following table, by which the flow of sweet milk to the two centrifuges can be approximately regulated when the velocity is ascertained; but he at the same time distinctly remarked that the figures must not be looked upon as absolutely faithful; and that he would not raise the correctness of these figures above the practical experiences others might have obtained.

Working powers of two Danish centrifuges.

Fat in scummed milk per cent.	SMALL CENTRIFUGE.			LARGE CENTRIFUGE.		
	Revolutions per minute.	Pounds of milk per hour.		Revolutions per minute.	Pounds of milk per hour.	
		At once 25° to 30°C.	Cold 10° to 12°C.		At once 25° to 30°C.	Cold 10° to 12°C.
0.20 to 0.25	2,000	200	130	1,500	550	370
	2,400	300	200	1,800	750	500
	2,800	400	270	2,100	950	630
0.20 to 0.25	2,000	300	200	1,500	800	530
	2,400	450	300	1,800	1,050	700
	2,800	600	400	2,100	1,300	870

The table as well as the experiment on the whole speak in favor of centrifuges of great velocity, but it must not be forgotten that the strain increases with the velocity and also the danger of the centrifuges heating and getting fast in the ruts likewise increases with its velocity and weight. The lecturer is however of the opinion that there is no great fear of a small centrifuge with a velocity of 2,400–2,600 revolutions per minute becoming heated, so long as ordinary care is taken in the working. The danger of a large centrifuge with a velocity of 1,800 and above becoming heated is certainly greater, but nevertheless need not frighten one from going over to the centrifuge system, although it may perhaps influence the decision as to whether one should have large or small centrifuges. Two small centrifuges are supposed to demand less dragging power than one large, but with the latter there are on the other hand fewer parts to keep clean and attend to than with two small ones.

The last part of the lecture had reference to sundry experiments with centrifuge portions, with power meters, &c., carried on at Ourup farm and Vestervigscloister.

The older Danish centrifuge was provided with a cream-run, or gutter, which prevents the cream, during the motion occasioned in its removal, from being carried further, whilst the newer constructed centrifuges have not this gutter. From the experiments at Vestervigscloister it would not appear as though this cream-run was of any consequence.

With the De Laval centrifuge the sweet milk is carried through a pipe right into the milk layer in the centrifuge, thus behind the cream; whilst in the Danish it flows down into the centrifuge's empty compartment before the milk and cream, and is thus thrown against the cream layer, and penetrates through it into the milk. As the disturbances caused thereby can probably act unfavorably in the cream separation, a special stream apparatus was constructed for the small centrifuge, by which the sweet milk is carried direct into the milk layer at the very bottom of the centrifuge, thus somewhat behind the cream, and there were thereafter arranged experiments for a comparison between the two centrifuges. The result, however, was that out of nine trials four were in favor of a flow in front of, and five in favor of a flow behind, the cream; and the average difference on the whole was only 0.02 pounds of butter from 100 pounds milk, that is to say entirely without importance.

In former experiments it was made manifest that the centrifuges' powers for separating the cream are the same, whether it be driven by horse or steam power, when the velocity is the same. A trial was also made to ascertain how much power had been employed with the small centrifuge at different rates of velocity. and also the limit to which it could be drawn by an ordinary horse. The result will be seen by the following table:

Description.	Revolutions per minute of centrifuges.	Power-meter.	Horse velocity.	Work per second.
		Pounds.	*Feet.*	*Pounds.*
a. A used centrifuge, September, 1882	1,500	52	2.72	141
	2,154	68	2.87	195
	1,390	120	2.63	316
	2,650	120	2.99	359
b. A non-previously used centrifuge, September, 1882	1,547	54	2.40	130
	1,706	64	2.64	169
	1,987	80	3.00	240
	2,258	96	2.82	271
	2,341	118	2.40	283
	2,400	122	2.50	305
	2,900	138	3.00	414
	2,923	144	3.00	432

As the employed power-meter is not a very minutely marking one, some of the figures may possibly not be quite accurate, but on the whole the experiments may be considered fully reliable.

The several experiments were carried on with a middling strong horse which is accustomed to draw in this horse-work. Even with the 2,900 revolutions it seemed to draw like two horses before the plow in ordinary plowing, still it was doubtless hard work to draw at this velocity for two to three hours. At the lowest velocity, the horse went commonly with slack traces, and with a velocity of 2,200 it has frequently at the same time drawn the centrifuge and a churn with 60 to 80 pounds cream without being overloaded.

For the small centrifuge one may about calculate that the power rate for 2,000, 2,400, and 2,800 revolutions per minute to be respectively one-half, three-fourths, and one horse-power, with which, according to a previous given table, can be scummed clean, respectively, 200, 300, and 400 pounds, at 100 pounds per one-fourth horse. As it is difficult to obtain clean scumming of the centrifuge's first and last contents, the lecturer gave the following instructions for a practical mode of working these two centrifuges: The centrifuge to be filled with sweet milk, either before it is to work, or as soon as possible, whilst in motion it is working up to full power. As there will at once take place a separation of much fat cream, this taken away when the cream and milk have reached up to the scum-pipe in an ordinary way. One then permits gradually or by fits and starts a moderate stream of sweet milk to flow down into the centrifuge, so that, in about ten minutes after the centrifuge is set in motion and filled, there can be introduced as much sweet milk as will answer to the separated milk; that is to say, about one-fifth of the centrifuge's contents. During this period the milk-pipe is only used by starts a couple of times for the purpose of carrying off the cream, which is separated in the chamber for clean scummed milk. Thereafter it is worked as usual, with a full flow of sweet milk, but interrupted taking away of cream and scummed milk, so that there is obtained 18 to 20 per cent. cream until the centrifuge is filled with sweet milk. In order that the last contents may be clean scummed, the scummed milk is thrown into the flow vessel, about one-fifth of the centrifuge's contents, and the milk-pipe is screwed off, so that cream only can be taken away. As soon as the first fat cream is separated, the skimmed milk is allowed for at least a quarter of an hour to flow in by fits and starts, and the cream is also removed by fits and starts.

With one of the Danish and with Lehfeldt's new centrifuge there often occurs a milk waste, arising from the milk's penetrating through the covering which encircles the centrifuge. To prevent this mishap the opening in the lid of the Danish centrifuge has been provided, at the suggestion of the lecturer, with a one-inch bent border, which is in the same direction with the lid cover. The escape of milk will thus be counteracted, unless it should be squirted out with such force that the jets are thrown right out of the centrifuge; when the points at the time have a correct position and shape the squirting will either cease or be of no importance. Nothing is gained by changing the round form of the points, but the opening should be larger than it has usually been, one-eighth to one-fourth, according to the greatness of the flow. The points should further be provided with sharp borders; they should have a horizontal position, and form an angle of 45° with the tangent-plane to the cream and the surface of the milk to the point of contact. The points are of steel, and should be able to be screwed in to the brass pipe, so that they could easily be replaced; but the shape of the points would not appear to be of any consequence.

In conclusion the lecturer exhibited and explained some new apparatuses, which will doubtless be of great practical importance in centrifuge dairies. With the aid of a newly-constructed stream funnel one can vary the flow and maintain a constant stream. This iron-twined constructed funnel will hold 10 to 12 pounds milk, is flat bottomed, 3 to 4 inches high, and can be screwed fast to the covering over the centrifuge in such a manner that it goes in a little over the opening therein. From the bottom of the funnel go two pipes of ball form right down to the bottom of the centrifuge, and through each pipe is placed a cylinder bar, which exactly fills up the lowermost opening, and can thus close it. By drawing the bar higher up, the opening between it and the pipe's compass becomes larger and the flow increases. In the funnel can be placed one or more of Wagner's side strainers, the one within the other, so that the milk can be strained very slowly and very carefully without the least trouble just before it flows down into the centrifuge, which tends to prevent any stoppage in the scumming points. As it lessens the dairy labor greatly, when the skimmed milk can flow at once from the centrifuge to the cheese tub, a bending has been applied to the scum-pipe, to which can be screwed soldered pipes of various lengths. The power by which the milk is forced into the scum-pipe has shown itself to be insufficient to raise the milk 4 to 5 feet perpendicularly, so that it can flow with ease through the tube to the cheese tub, even when this is 10 to 30 ells from the centrifuge. With a similar raising tube the cream can also be carried to a cooling apparatus, which consists of a tin pail with an intermediate space of 3 to 4 inches, which is kept filled with ice. With this apparatus one has succeeded in less than a minute to cool the cream from 29° C. to 10.5° C., inasmuch as the cream, with the aid of a moveable funnel, is equally distributed over the cooling surface and then run off again through an opening in the bottom. This method of cooling cream is at the same time economical as regards the consumption of ice.

At the close of the lecture, Counselor Testdorf returned thanks to Professor Fjord and his assistants for these experiments, which had been carried on with such great care and had led to such great results. It is owing to these experiments that the centrifuge has already made such advances in Denmark, and the information given in this report will no doubt be of great importance for our numerous union dairies, as well as of great service to the small land-owners. In Holstein, where there has not been any one like Professor Fjord to lead such experiments, the centrifuge has in a great measure been a failure, and has been given up; only in the towns is it partially used, but scarcely at all in the dairies themselves. The quality of the butter centrifuged at Ourup farm has shown itself to be very good, especially after the introduction of the cooling apparatus, by which the cream can at once be brought down to 7° C., the butter has shown itself to be both good and preservable. At the request of Professor Fjord some elucidations were given as to the butter yield from a dairy and compared with the proceeds from the ice and centrifuge systems. During the last five years, when there has been made sweet butter at said farm, the average yearly consumption per pound of fresh-weighed butter in 1877–'78 was 29.11 pounds milk; in 1878–'79, 31.31 pounds; in 1880–'81, 30.89 pounds; and in 1881–'82, 30.73 pounds milk. When 28 pounds milk to 1 pound of butter is reckoned as the normal consumption in a good ice dairy, and that from 16 pounds milk is obtained 1 pound of cheese, so will 100 pounds in an ice dairy yield $3\frac{4}{7}$ pounds butter and 6¼ pounds cheese. In a centrifuge dairy 25 pounds milk, on the other hand, may be reckoned to 1 pound butter; and 100 pounds milk by this system will therefore yield 4 pounds butter and 6¼ pounds cheese. The cheese from the ice dairy can be reckoned at 8.04 cents per pound, but centrifuge cheese is less sought after and has to be sold cheaper—5.88 cents per pound. Placing the butter at the same price for both systems, at 26.80 cents per pound, the proceeds of 100 pounds milk will be as follows:

ICE DAIRY.

	Cents.
$3\frac{4}{7}$ pounds butter	95.67
6¼ pounds cheese	50.11
Total	145.78

CENTRIFUGE SYSTEM.

	Cents.
4 pounds butter	107.21
6¼ pounds cheese	36.7
Total	143.91

It will thus be seen that the ice dairy has given as fully as good return as the centrifuge dairy, and I would therefore caution against too great eagerness in abandoning the ice dairies and replacing them with centrifuge dairies.

Agriculturists will find sufficient employment for centrifuges in their ice dairies without abandoning these at the same time.

The question being asked as to the quantity of fat to be found in the centrifuged cheese which was sold at 5.90 cents per pound, it was answered that it contained about 0.6 per cent. fat. It was also stated by Professor Fjord that he had commenced upon some cheese experiments, which at present were promising well, so that there were good prospects of being able to give answers to several questions relating to centrifuged cheese. In reply to a question whether there was any difference in the results with regard to the butter when the centrifuge was worked by horse or steam power, Professor Fjord replied by referring to his previous experiments, which showed that there was no difference when the velocity was the same.

Reference was made to the before-mentioned results, namely, that the centrifuge system gave 1.88 cents less per 100 pounds milk than the ice system. Supposing one could introduce another fat substance into the milk, would the result be then different? With the present prices would margarine thus be able to give the centrifuge system a surplus of 1.88 cents? Professor Fjord at present was not in the position to answer, but was collecting materials for the purpose of elucidating it.

HENRY B. RYDER,
Consul.

UNITED STATES CONSULATE,
Copenhagen, Denmark.

AVERAGE VALUE OF ITALIAN IMPORTS AND EXPORTS.

REPORT BY CONSUL WELSH, OF FLORENCE.

The knowledge of the actual average value of goods in this country as calculated from official statistics should be valuable information to American exporters, and having been able to secure such data from a reliable source, I have the honor to submit the same.

The report will also serve as an illustration of the tariff laws and rates of duty requested by circular under date of December 1st, 1881.

Every year about this time the Italian minister of agriculture, industry, and commerce requires from all chambers of commerce and the custom houses the standard prices of articles described in the tariff, both exports and imports. These prices are then given to the minister of finance as the key for the compilation of annual returns.

The following table will show the average value of goods delivered at Italian ports on the frontier.

The duties, import or export, are not included. From latest information I may add that the following articles will be subject to a decrease of about one-fifth in value:

1st. Owing to increased native production: Oil, oxide of iron, carbonate of lead, varnish prepared with spirits, silk umbrellas.

2d. Owing to depreciation in value of silver: Nitrate of silver, sulphuret of mercury.

3d. Owing to fluctuations in prices: Coffee, saffron, indigo, cochineal.

4th. Owing to increased imports from Australia: Yarns of wool.

5th. Owing to production of coarser and heavier qualities: Straw-braids and sable furs.

An increase of one-fifth or thereabouts will probably be found in the value of pepper, spirits, yellow and white wax, and bleached cotton, owing to increased consumption; and on pianos and on all musical instruments owing to increased demand.

The following are the currency weights and measures used in the table and reduced to United States standard, viz:

Lire	$0.193	
Hectogram	.2205	pounds, avoirdupois.
Kilogram	2.204	pounds, avoirdupois.
Metrical quintal	220.462	pounds, avoirdupois.
Ton	2204.62	pounds, avoirdupois.
Hectoliter	26.42	gallons.
Meter	39.370	inches.

WM. L. WELSH,
Consul.

UNITED STATES CONSULATE,
Florence, Italy, December 12, 1882.

Statement showing the average value of goods imported and exported into and from Italy.

Articles.	Average estimate of value.	
	Imports.	Exports.
I.—SPIRITS, WINES, OILS, &C.	*Lira.*	*Lira.*
Waters, mineral, natural, artificial, including aerated .... per quintal..	70.00	70.00
Wine:		
In casks and barrels .... per hectoliter..	45.00	35.00
In bottles .... per hundred..	320.00	220.00
Vinegar:		
In casks and barrels .... per hectoliter..	25.00	25.00
In bottles .... per hundred..	110.00	100.00
Beer:		
In casks and barrels .... per hectoliter..	40.00	30.00
In bottles .... per hundred..	80.00	35.00
Spirits:		
Not sweetened or perfumed, in casks or barrels* .... per hectoliter..	65.00	65.00
Sweetened or perfumed, in casks or barrels .... do....	150.00	150.00
Of all kinds, in bottles .... per hundred..	....	....
Ether and chloroform .... per quintal..	250.00	....
Oils:		
Olive oil .... do....	125.00	140.00
Cotton oil .... do....	....	....
Others .... do....	100.00	100.00
Mineral, raw .... do..	20.00	....
Mineral, refined .... do..	29.00	....
Essence oils:		
Of roses .... per kilogram..	1,800.00	....
Of orange, and its varieties .... do....	20.00	20.00
Others .... do....	20.00	20.00
II.—GROCERIES AND TOBACCO.		
Coffee .... per quintal..	190.00	....
Chicory and other substances substituted for coffee:		
Desiccated .... do....	40.00	......
Ground, or only roasted .... do....	70.00	70.00
Molasses .... do....	20.00	20.00
Sugar:		
Refined .... do....	80.00	....
Not refined .... do....	65.00	....
Comfits and conserves with sugar or honey .... do....	200.00	200.00
Tea biscuits .... do....	150.00	150.00
Sirups:		
For draughts .... do....	140.00	140.00
Of fecula .... do....	40.00	....
Cocoa-nut .... do....	245.00	....
Chocolate .... do....	300.00	300.00
Cinnamon .... do....	250.00	....
Cloves .... do....	350.00	....
Pepper and pimento .... do....	100.00	....

*1,002 pure alcohol.

Statement showing the average value of goods, &c.—Continued.

Articles.		Average estimate of value.	
		Imports.	Exports.
II.—GROCERIES AND TOBACCO—Continued.			
		Lira.	*Lira.*
Tea	per quintal	530.00	....
Vanilla	do	6,500.00	....
Saffron	do	12,500.00	....
Nutmegs with husk	do	230.00	....
Nutmegs without husk	do	600.00	....
Mustard:			
Seeds	do	160.00	60.00
Liquid, or otherwise	do	150.00	150.00
Spices	do	200.00	300.00
Tobacco:			
Leaves	per kilogram	115.00	....
Havana cigars	do	60.00	....
Cigars of other kinds*	do	3.30	3.40
III.—CHEMICAL PRODUCTS, MEDICINES, RESIN, AND PERFUMERIES.			
Acids:			
Arsenical	per quintal	30.00	....
Boracic	do	80.00	80.00
Gallic, acetic	do	50.00	25.00
Hydrochloric	do	9.00	9.00
Nitric	do	50.00	50.00
Sulphuric	do	13.00	13.00
Tartaric	do	400.00	400.00
Others	do	250.00	250.00
Ammonia, potash	do	100.00	100.00
Soda:			
Caustic, impure	do	25.00	25.00
Quinine salts	per kilogram	400.00	400.00
Alkaloids	do	150.00	150.00
Oxide of iron, lead, &c	per quintal	70.00	90.00
Acid of alumina, iron, &c	do	80.00	80.00
Carbonates:			
Barytes	do	10.00	10.00
Magnesia	do	140.00	120.00
Lead	do	85.00	85.00
Soda and potash	do	18.00	50.00
Magnesia, caustic and calcined	do	300.00	300.00
Chloride of lime, potash, &c	do	13.00	13.00
Chloride of potassium	do	17.00	....
Nitrates:			
Silver	per kilogram	160.00	....
Refined soda	per quintal	50.00	50.00
Raw soda	do	40.00	40.00
Borax	do	100.00	100.00
Marine salt	do	100.00	11.00
Sulphate of alum	do	17.00	17.00
Sulphates:			
Barytes	do	8.00	8.00
Iron and manganese	do	10.00	10.00
Copper, zinc, &c	do	48.00	48.00
Magnesia	do	8.00	8.00
Soda and potash	do	12.00	10,00
Tartar	do	185.00	125.00
Sulphuret of mercury	do	700.00	....
Wooden matches	do	55.00	30.00
Other chemical products	do	50.00	80.00
Gunpowder†	do	550.00	140.00
Wax matches	do	235.00	230.00
Capsules and empty cartridges	do	470.00	470.00
Licorice roots	do	35.00	35.00
Herbs, flowers, leaves, &c., medicinal roots	do	300.00	100.00
Cassia and tamarind	do	50.00	50.00
Manna	do	440.00	440.00
Refined camphor	do	325.00	325.00
Lemon and orange barks	do	35.00	35.00
Quinine barks	do	550.00	550.00
Orange juice	do	20.00	....
Lemon juice	do	20.00	22.00
Concentrated lemon juice	do	132.00	132.00
Aloe juice, and others	do	130.00	150.00

---

* Cuba, Varinas, Porto Rico, Java, Manila, Columbias.

† Export very inferior.

Statement showing the average value of goods, &c.—Continued.

Articles.	Average estimate of value.	
	Imports.	Exports.
III.—CHEMICAL PRODUCTS, MEDICINES, RESIN, &C.—Continued.		
	Lira.	*Lira.*
Medicines not specified ... per quintal	200.00	40.00
Compound medicines ... do	500.00	500.00
Raw gums:		
Resin, &c ... do	28.00	28.00
All other kinds ... do	220.00	220.00
Common soap ... do	85.00	60.00
Perfumed soap ... do	425.00	425.00
Sealing wax ... do	350.00	350.00
Perfumeries ... do	450.00	450.00
IV.—COLORS AND ARTICLES FOR DYEING AND TANNING.		
Articles for dyeing and tanning:		
Not ground ... per quintal	30.00	24.00
Ground ... do	35.00	25.00
Gambier ... do	45.00	45.00
Indigo, cochineal, and kermes ... do	1,500.00	1,500.00
Prussiate of potash, yellow and red ... do	350.00	...
Dried colors of tar ... do	1,600.00	1,600.00
Paste colors of tar ... do	1,400.00	1,400.00
Dyeing extracts of every kind ... do	120.00	50.00
Colors ... do	250.00	100.00
Varnish prepared with spirits ... do	250.00	250.00
Other kinds of varnish ... do	300.00	300.00
Pencils without sheaths ... do	160.00	...
Pencils with sheaths ... do	350.00	...
Inks ... do	150.00	80.00
Wax for shoes ... do	80.00	80.00
Calcined bones, &c ... do	25.00	25.00
Black, not specified ... do	32.00	32.00
V.—HEMP, FLAX, JUTE, AND OTHER VEGETABLE FIBERS, EXCEPT COTTON.		
Raw hemp ... per quintal	95.00	95.00
Raw flax ... do	130.00	110.00
Other vegetable fibers, raw ... do	50.00	50.00
Hemp, flax, jute, combed ... do	200.00	150.00
Flax and hemp, cordage and cables of ... do	145.00	128.00
Nets ... do	250.00	250.00
Flax and hemp, yarns of, raw ... do	360.00	280.00
Jute:		
Yarns of, single ... do	90.00	90.00
Other yarns of, single ... do	105.00	105.00
Single yarns, dyed ... do	460.00	380.00
Yarns, twists, grey, washed or bleached ... do	510.00	430.00
Twists, dyed ... do	560.00	480.00
Tissues of jute, raw ... do	120.00	...
Tissues of flax and hemp:		
Raw ... do	120.00	...
For packing ... do	155.00	155.00
Dyed ... do	155.00	...
Printed ... do	780.00	680.00
Embroidered ... do	2,400.00	2,400.00
Hoisery and trimmings of jute ... do	1,000.00	1,000.00
Buttons and ribbons of jute ... do	900.00	900.00
Laces ... per kilogram	600.00	600.00
Sewn articles ... per quintal	400.00	400.00
VI.—COTTON.		
Cotton in flocks, &c ... do	165.00	165.00
Cotton waddings ... do	185.00	185.00
Yarns ... do	...	...
Twists ... do	...	...
Warps ... do	...	...
Tissues, embroidered ... do	1,400.00	1,400.00
Muslin, &c ... do	1,900.00	1,900.00
Buttons, hosiery, and trimmings ... do	800.00	800.00
Laces and ribbons ... do	620.00	620.00
Laces ... do	2,350.00	2,350.00
Velvets ... do	1,400.00	1,400.00
Sewn articles ... do	480.00	480.00
VII.—WOOL, HORSEHAIR, &C.		
Wool in fleece ... do	400.00	450.00
Horsehair, raw or dyed ... do	290.00	290.00

Statement showing the average value of goods, &c.—Continued.

Articles.		Average estimate of value.	
		Imports.	Exports.
VII.—WOOL, HORSEHAIR, &c.—Continued.			
		Lira.	*Lira.*
Curled horsehair	per quintal	360.00	360.00
Yarns of wool, &c	do	....	....
Mattresses of every kind	do	330.00	330.00
Tissues of carded wool	do	1,000.00	900.00
With cotton warp	do	600.00	600.00
Of combed wool	do	1,400.00	1,200.00
With cotton warp	do	1,000.00	1,000.00
Of wool, embroidered	do	1,800.00	....
Felt for hats	do	580.00	580.00
Tarred felts	do	290.00	290.00
Horsehair tissues:			
For bolters	do	540.00	540.00
Other purposes	do	580.00	580.00
Hosiery and trimmings	do	1 800.00	1,800.00
Laces and ribbons	do	1,500.00	....
Buttons	do	970.00	970.00
Laces	do	4,800.00	....
Blankets, of wool stuffing	do	380.00	380.00
Carpets, of wool stuffing	do	400.00	400.00
Wool carpets and blankets	do	600.00	600.00
Sewn articles	do	2,500.00	2,500.00
VIII.—SILK.			
Silk worm eggs	per kilogram	380.00	....
Cocoons	per quintal	1,150.00	....
Raw silk	do	4,800.00	7,000.00
Dyed raw silk	per kilogram	65.00	65.00
Sewing silk	do	55.00	55.00
Carding silk	per quintal	900.00	900.00
Carding silk, combed and dyed	do	900.00	....
Silk velvet	per kilogram	190.00	190.00
Blank tissues of silk	do	85.00	85.00
Other silk tissues	do	120.00	120.00
Tissues of carding silk	do	80.00	80.00
Tissues of silk and floss silk, mixed	do	60.00	60.00
Common silk tissues	do	30.00	30.00
Silk laces:			
Glossy	do	160.00	30.00
Operated	do	250.00	250.00
Mixed with gold and silver	do	200.00	100.00
Buttons:			
Covered with silk	do	18.00	15.00
Mixed with other materials	do	14.00	10.00
Sewn articles	do	160.00	160.00
IX.—WOOD AND STRAW.			
Charcoal	per ton	75.00	75.00
Firewood	do	28.00	28.00
Timber for cabinet-making:			
Not sawn	per quintal	35.00	25.00
Sawn	do	80.00	40.00
Timber, in plants or inlaid squares, for flooring	do	140.00	120.00
Timber, common, in the rough, sawn, squared, &c	per cubic meter	50.00	50.00
Small boards and hoops	per quintal	55.00	55.00
Barrels	per hectoliter	6.00	6.00
Furniture, unstuffed, of bent wood	per quintal	150.00	6.00
Other articles of furniture, unstuffed	do	200.00	170.00
Quilted furniture	do	380.00	350.00
Cabinet furniture	do	550.00	550.00
Oars, stakes, and poles	do	10.00	10.00
Roots for brushes	do	50.00	100.00
Raw cork	do	50.00	50.00
Finished cork	do	130.00	130.00
Wood, common, utensils, &c	do	130.00	130.00
Wood, articles of trade	do	370.00	370.00
Wagons for common roads	number	400.00	400.00
Carriages	do	....	....
Ships, boats, &c	per cubic ton	Value.	Value.
Canes, rushes, and twigs	per quintal	20.00	12.00
Basket-makers' works:			
Coarse	do	70.00	70.00
Fine	do	250.00	250.00
Straw braids	do	....	2,200.00
Braids of bark, brooms	do	....	....
Cordage of brooms and tree fibers	do	80.00	80.00
Straw hats	per hundred	....	180.00

***Statement showing the average value of goods, &c.*—Continued.**

Articles.		Average estimate of value.	
		Imports.	Exports.
X.—Paper and Books.			
		Lira.	*Lira.*
Vegetal rags	per quintal	85.00	45.00
Animal rags	do	25.00	25.00
Mixed rags	do	30.00	....
Paste, of wood, straw, and similar substances	do	33.00	....
Paper:			
White or of colored paste	do	140.00	120.00
Colored, gilt, painted, and paperhanging	do	220.00	180.00
Blotting and thick wrapping	do	50.00	50.00
Geographical maps	do	1,600.00	1,600.00
Playing cards	per pack	80.00	40.00
Printing, lithographic work, &c	per quintal	1,600.00	1,400.00
Pasteboards	do	....	....
Books, printed, not bound	do	500.00	400.00
Books:			
In boards	do	600.00	500.00
Bound in leather or parchment	do	750.00	650.00
Otherwise bound	do	3,800.00	....
Registers:			
Sewn or in boards	do	180.00	140.00
Bound in leather or parchment	do	300.00	....
Otherwise bound	do	500.00	....
Printed music	do	600.00	600.00
Manuscripts	do	Value.	Value.
XI.—Hides and Skins.			
Hides and skins, raw, green, or dried:			
Other than for furry	per quintal	250.00	260.00
For furry	do	550.00	550.00
Hides dressed with hair:			
Fine	do	3,000.00	3,000.00
Common	do	800.00	700.00
Hides:			
Dressed without hair	do	520.00	500.00
Dressed like morocco leather	do	1,000.00	900.00
Varnished	do	1,900.00	1,900.00
Dressed with hair and finished	do	700.00	700.00
Kids' skins, tanned	do	2,500.00	2,600.00
Skins for shoes	do	800.00	800.00
Fleshy sides for hides	do	30.00	30.00
Muffs:			
Fine	each	100.00	....
Common	do	20.00	20.00
Furrier works, not specified	per quintal	....	....
Harness	do	....	....
Saddlery, articles of	each	100.00	100.00
Leather, articles of	per quintal	700.00	700.00
Gloves	per hundred	200.00	130.00
Boots and half boots	do	1,200.00	1,200.00
Shoes of every kind	do	900.00	900.00
Valises	each	35.00	25.00
Leather works, not specified	per quintal	750.00	750.00
XII.—Minerals, Metals, and their Productions.			
Iron minerals	per ton	11.00	11.00
Lead	do	195.00	195.00
Copper	do	130.00	130.00
Zinc	do	60.00	60.00
Minerals of every other kind	per quintal	15.00	3.00
Dross	do	10.00	10.00
Shreds, sling and filings	do	9.00	9.00
Iron, cast in pigs or masses	per ton	90.00	110.00
Iron, cast:			
Worked in rough castings	per quintal	25.00	25.00
Worked, plain, turned, tinned	do	70.00	70.00
Iron and steel:			
Raw	do	23.00	23.00
Rolled or hammered	do	23.00	35.00
In rods	do	27.00	40.00
In plates 4 millimeters thick	do	27.00	35.00
In plates less than 4 millimeters thick	do	32.00	40.00
Forged in axletrees, anchors	do	42.00	42.00
Rails for railways	per ton	195.00	195.00

Statement showing the average value of goods, &c.—Continued.

Articles.		Average estimate of value.	
		Imports.	Exports.
XII.—MINERALS, METALS, AND THEIR PRODUCTIONS,—Continued.			
Iron of second fabrication:		*Lira.*	*Lira.*
Plain	per quintal	55. 00	55. 00
Fitted up with other metals	do	90. 00	90. 00
Tinplate:			
Not worked	do	58. 00	58. 00
Worked	do	95. 00	95. 00
Steel:			
In bars, rods, plates, and steel wire	do	80. 00	115. 00
In springs of every kind	do	65. 00	65. 00
Otherwise wrought	do	120. 00	120. 00
Knives for trades, arts	do	200. 00	200. 00
Scythes and reaping hooks, tools and implements	do	110. 00	110. 00
Copper and bronze, in pigs, cakes, &c	do	170. 00	170. 00
Copper and bronze:			
In leaves, rods, &c	do	215. 00	215. 00
In wires 5 millimeters thick, or less	do	235. 00	....
Hammered	do	255. 00	255. 00
Other works of	do	320. 00	320. 00
In rods and wire s, gilt	do	....	....
Iron metallic tissues	do	300. 00	300. 00
Tissues of copper and brass	do	600. 00	600. 00
Nickel and its alloys:			
In pigs, cakes, &c	do	230. 00	....
In leaves, rods, and wire	do	420. 00	420. 00
Other works of	do	1, 050. 00	1, 050. 00
Lead and its alloys:			
In pigs, cakes, &c	do	40. 00	40. 00
In leaves, tubes, &c	do	45. 00	45. 00
In printing types	do	380. 00	320. 00
Other works of	do	50. 00	50. 00
Tin and its alloys:			
In pigs	do	245. 00	245. 00
In leaves	do	270. 00	270. 00
Other works of	do	270. 00	270. 00
Zinc:			
In pigs and shreds	do	45. 00	45. 00
In plates and leaves	do	65. 00	65. 00
Other works of, not gilt	do	170. 00	170. 00
Other works of, gilt	do	270. 00	....
Antimony and arsenic	do	175. 00	175. 00
Quicksilver	do	480. 00	480. 00
Raw metals not specified	do	300. 00	....
Guns:			
Complete	per hundred	8, 000. 00	4, 000. 00
Parts of	per quintal	600. 00	600. 00
Pistols and revolvers:			
Complete	per hundred	1, 800. 00	1, 800. 00
Parts of	per quintal	600. 00	....
Engines, steam:			
Fixed	do	100. 00	100. 00
Locomotives	do	150. 00	150. 00
Other machines	do	130. 00	130. 00
Gasometers and accessories	do	90. 00	90. 00
Copper or other metals, apparatus of, for heating	do	570. 00	570. 00
Boilers	do	110. 00	110. 00
Galoons of cards	do	1, 000. 00	1, 000. 00
Wagons:			
For luggage and merchandise	do	90. 00	90. 00
For passengers	do	130. 00	....
Raw gold in rods	per kilogram	2, 600. 00	2, 220. 00
Wire-drawn gold	do	2, 700. 00	....
Gold wrapped on silk	do	2, 700. 00	....
Gold in leaves	do	400. 00	....
Gold moneys	do	3, 100. 00	3, 100. 00
Raw silver on rods	do	170. 00	170. 00
Wire-drawn silver	do	175. 00	175. 00
Silver wrapped on silk	do	190. 00	....
Silver hammered in leaves	do	40, 00	....
Silver moneys	do	200. 00	200. 00
Goldsmiths' wares	per hectogram	400. 00	400. 00
Silversmiths' wares	per kilogram	350. 00	350. 00
Gold jewels	per hectogram	550. 00	550. 00
Silver jewels	per kilogram	300. 00	300. 00
Watches in gold cases	each	80. 00	80. 00
Other watches	do	22. 00	22. 00
Clocks	do	40. 00	40. 00
Clocks with hand-organ	do	25. 00	25. 00

***Statement showing the average value of goods, &c.*—Continued.**

Articles.	Average estimate of value.	
	Imports.	Exports.
XII.—MINERALS, METALS, AND THEIR PRODUCTIONS—Continued.		
Movement works:	*Lira.*	*Lira.*
Of watches ... per kilogram	12.00	10.00
Of clocks ... per quintal	3,000.00	....
Of tower clocks ... do	500.00	....
Materials for watches and clocks ... do	5,000.00	5,000.00
XIII.—STONES, CLAYS, PLATES, GLASSES, AND CRYSTALS.		
Rubies, emeralds, and diamonds ... value	....	....
Agates, onyxes, and opals ... do	....	....
Raw marble ... per ton	....	55.00
Raw alabaster ... per quintal	5,000.00	10.00
Marble and alabaster:		
In boards ... do	....	10,00
In statues ... do	....	300.00
Otherwise worked ... do	....	30.00
Stones for building ... per ton	80.00	50.00
Colored clay ... per quintal	10.00	10.00
Stones, clay, and minerals not specified ... per ton	80.00	50.00
Articles made up of bricks ... do	40.00	40.00
Raw and refined sulphur ... do	116.00	116.00
Solid bitumen ... do	25.00	25.00
Pit coal ... do	30.00	30.00
Graphite ... per quintal	25.00	5.00
Marble squares for paving, varnished or enameled ... do	18.00	10.00
Clay, common works ... do	20.00	15.00
Majolica works:		
Rough ... do	24.00	20.00
Fine ... do	40.00	85.00
Gilted or ornamented ... do	170.00	120.00
Porcelain, articles of:		
White ... do	150.00	150.00
Gilted or ornamented ... do	325.00	280.00
Glass or crystals:		
Articles of, dull, not polished ... do	60.00	60.00
Articles of window glass ... do	45.00	45.00
Articles of, polished, not silvered ... do	190.00	190.00
Sheets of polished and silvered, including mirrors ... do	300.00	300.00
Manufactures of, only blown or molded ... do	60.00	50.00
Manufactures of, colored, cut, painted, enameled, &c ... do	125.00	125.00
Common bottles ... per 100	24.00	24.00
Large bottles ... per quintal	38.00	38.00
Glass in pieces:		
Broken ... do	5.00	5.00
Enamels in the shape of beads, prisms, stone ... do	180.00	180.00
Enamels in pigs ... do	95.00	95.00
XIV.—CEREALS, FLOUR, PASTE, AND VEGETABLE PRODUCTS NOT INCLUDED IN OTHER CATEGORIES.		
Wheat and corn ... per ton	270.00	270.00
Indian corn ... do	165.00	165.00
Other grains ... do	185.00	185.00
Oats ... do	190.00	195.00
Chestnuts ... do	250.00	250.00
Potatoes ... do	....	110.00
Rice, with or without husk ... do	345.00	385.00
Flour ... per quintal	42.00	38.00
Bran ... do	15.00	15.00
Corn paste ... do	60.00	60.00
Bread and sea-biscuits ... do	55.00	55.00
Fecula of beans and potatoes ... do	70.00	....
Starch ... do	73.00	68.00
Oranges and lemons ... do	24.00	24.00
Cedars, &c ... do	50.00	50.00
Fresh grapes ... do	....	22.00
Fruit, fresh ... do	20.00	20.00
Dates ... do	130.00	130.00
Carobs ... do	18.00	18.00
Pistachio nuts, with or without husk ... do	450.00	450.00
Almonds, without husk ... do	180.00	180.00
Almonds, with husk ... do	50.00	50.00
Walnuts and nuts ... do	65.00	65.00
Oleaginous fruits, not specified ... do	100.00	100.00
Dried figs ... do	48.00	35.00

***Statement showing the average value of goods, &c.*—Continued.**

Articles.	Average estimate of value.	
	Imports.	Exports.
XIV.—CEREALS, FLOUR, PASTE, AND VEGETABLE PRODUCTS, &c.—Continued.	*Lira.*	*Lira.*
Dried raisins ... per quintal	64.00	60.00
Dried fruits, not specified ... do	42.00	42.00
Fungus and bruffles ... do	525.00	525.00
Hops ... do	400.00	400.00
Oleaginous seeds ... do	50.00	50.00
Other seeds ... do	50.00	50.00
Oil of palms and cochineal ... do	100.00	100.00
Walnut cakes and of other oleaginous materials ... do	18.00	18.00
Fresh vegetables ... do	....	20.00
Vegetable products, not specified ... do	10.00	10.00
XV.—ANIMAL PRODUCTS AND SPOILS OF ANIMALS, NOT INCLUDED IN OTHER CATEGORIES.		
Horses ... each	1,100.00	800.00
Mules ... do	500.00	500.00
Asses ... do	110.00	110.00
Oxen and bulls ... do	450.00	450.00
Cows ... do	375.00	300.00
Bullocks and young bulls ... do	200.00	200.00
Calves ... do	110.00	110.00
Cattle, of the sheep kind ... do	14.00	14.00
Cattle, of the goat kind ... do	15.00	15.00
Pigs:		
Weighing 20 kilograms or less on the hoof ... do	18.00	18.00
Weighing over 20 kilograms ... do	90.00	90.00
Fresh meats ... do	160.00	160.00
Poultry ... do	155.00	155.00
Meat, salted or smoked ... do	250.00	250.00
Meat, cooked ... do	200.00	200.00
Extract of meat ... do	800.00	800.00
Game, &c ... do	200.00	200.00
Leeches ... do	800.00	800.00
Entrails:		
Fresh ... do	50.00	50.00
Salted ... do	125.00	125.00
Fish, fresh, of all kinds ... do	85.00	85.00
Fish, dried or smoked ... do	55.00	55.00
Fish, in pickle ... do	70.00	95.00
Fish, pickled with oil ... do	140.00	140.00
Fish, preserved in tins ... do	170.00	170.00
Caviare, and other fish eggs ... do	600.00	600.00
Condensed milk ... per quintal	230.00	230.00
Butter:		
Fresh ... do	270.00	270.00
Salted ... do	275.00	275.00
Cheese ... do	190.00	190.00
Poultry eggs ... do	130.00	130.00
Grease of all kinds ... do	110.00	110.00
Stearic acid ... do	175.00	175.00
Stearine candles ... do	190.00	190.00
Bees, alive, within hives ... do	130.00	130.00
Honey, of all kinds ... do	85.00	85.00
Yellow wax:		
Not worked ... do	300.00	300.00
Prepared ... do	380.00	380.00
White wax:		
Not worked ... do	500.00	500.00
Prepared ... do	450.00	450.00
Stump of candles ... do	180.00	180.00
Glue ... do	105.00	105.00
Isinglass ... do	380.00	380.00
Raw feathers:		
For ornaments ... per kilogram	100.00	75.00
Worked ... do	360.00	....
Bed feathers ... do	7.00	....
Hats, not worked ... do	60.00	60.00
Finished hats ... do	100.00	150.00
Common sponges ... per quintal	480.00	480.00
Sponges, fine ... do	4,500.00	4,500.00
Raw coral ... per kilogram	35.00	35.00
Coral worked ... do	750.00	750.00
Raw ivory, mother of pearl, &c ... per ton	2,300.00	2,300.00
Horns, bones, &c., raw ... do	180.00	180.00
Manure ... do	100.00	90.00

Statement showing the average value of goods, &c.—Continued.

Articles.	Average estimate of value.	
	Imports.	Exports.
XVI.—SUNDRIES.		
Hosiery:	*Lira.*	*Lira.*
Common .... per quintal..	860.00	800.00
Fine .... do....	3,550.00	3,750.00
Fans:		
Common .... do....	700.00	700.00
Fine .... do....	4,500.00	4,500.00
Church organs .... do....	450.00	450.00
Portable organs .... each..	300.00	300.00
Pianos:		
Square and vertical .... do....	700.00	360.00
Grand .... do....	1,200.00	1,200.00
Harmoniums .... do....	300.00	300.00
Musical instruments, not specified .... do....	20.00	25.00
Instruments of optic and precision .... per quintal..	4,000.00	4,000.00
Gutta-percha:		
Raw elastic tissues .... do....	700.00	700.00
Manufactured in lace trimmings .... do....	1,500.00	1,500.00
Made up articles and hosiery .... do....	850.00	850.00
Bonnets .... per 100..	300.00	300.00
Hats:		
Of silk, pure or mixed .... do....	1,200.00	1,200.00
Of felt, and others .... do....	600.00	400.00
Ladies' hats, finished .... do....	1,800.00	1,800.00
Artificial flowers .... per kilogram..	150.00	150.00
Sets of artificial flowers .... do....	65.00	65.00
Hulks for articles of fashion .... do....	5.00	....
Silk umbrellas .... per 100..	900.00	750.00
Umbrellas of other stuffs .... do....	850.00	350.00
Articles for umbrellas .... per quintal..	500.00	500.00
Pencils, with or without staff .... do....	2,000.00	2,000.00
Objects for collection .... value..	....	....

TEA TRADE OF JAPAN.

REPORT BY CONSUL STAHEL, OF HIOGO.

In my dispatch of December 31, 1880, I had the honor to offer to the Department some observations on the tea trade of Japan, which is almost exclusively confined, as far as export is concerned, to the American markets.

Since then this trade has gone from bad to worse, until it has now become unsatisfactory both to the Japanese producer and the foreign exporter. Whether as a result of oversupply, or of such deterioration in the quality of the teas shipped as tends to check consumption, the prices to which tea has fallen in the United States are ruinously low, and if some improvement be not effected, this important commerce will be shunned by all who have anything to lose.

The Japanese Government, recognizing the gravity of the situation, is urging producers in this country to reform their methods of preparing the leaf, so as to furnish a better article for export, and thereby reduce the excessive supply. One argument employed towards this end is that the law lately enacted by Congress against adulterated teas will, if strictly executed, exclude much of the inferior stuff which has of late years passed in the United States as Japanese tea. It is highly desirable in the interest of all concerned that this law should so work, and its operation will certainly be watched from Japan with keen interest. If it excludes not merely that which is not at all tea-leaf, but also all teas falsified by artificial coloring, it will afford powerful aid to all, whether exporters or producers, who now deplore the decay of honest commerce through the success of such impostures on the ignorance of the consumer.

In addition to what the Government is doing to restore health to the tea trade, individual efforts are being made. Some remarkable articles on the subject have recently been published in the local journals, some of which I inclose herewith, and beg to commend to the attention of the Department.

If the facts therein set forth could be made public in the United States, American consumers of teas would probably exercise more discrimination in what they buy, and demand something better than the impure mixtures which they now get. It will be difficult to effect any reform in Japan while consumers in America seem to prefer sophisticated tea of a wholly unnatural color.

Some movement is now taking place among the growers of tea here against the production of the inferior leaf which gives the exporter his excuse for coloring the article to conceal that inferiority, and probably a larger proportion than usual of pure uncolored tea will this year be shipped to the United States. But this movement will fail of success unless tea-drinkers in the United States can somehow be awakened to the fact that bluish-gray and broken leaf is not the natural and proper form of this precious commodity, and that colored teas are neither clean nor wholesome, whereas the natural leaf of Japan is both good and delicious. If the American demand could be redirected towards these sound and pure teas, it is probable that the use of the fine and fragrant leaf produced in Japan would so increase as to restore vitality to a trade now vitiated by manipulations which naturally disgust all who become aware of them, and are perhaps the principal cause of the paralysis now prevailing in the tea business. The new season has opened in the tea districts of Japan. A cool spring has retarded the first pickings some twenty days, but no serious damage has been done to the plants, and an average crop is expected.

Prices are, however, so low that much discouragement exists among all engaged in the trade. At the equivalent of last New York quotations production is unprofitable even in this country of cheap labor, and it will probably be considerably reduced if the market long continues in its present unsatisfactory condition.

J. STAHEL,
Consul.

UNITED STATES CONSULATE,
OSAKA AND HIOGO, JAPAN,
Hiogo, May 26, 1883.

THE TEA TRADE OF JAPAN.

[From the Japan Weekly Mail of March 10, 1883.]

In our recent retrospect of the tea trade of 1882 we said that, to maintain the vitality of this important branch of the commerce of Japan, some new conditions of its exercise seemed indispensable. We shall presently state what, in our view, these new conditions should be. But first it may be well to consider the character and volume of the demand for teas in America, which is the only foreign market for the Japanese leaf.

On referring to such statistics as we have at hand, we find that about twenty years ago, when the export from Japan had just begun, the United States consumed annually about 40,000,000 pounds of all sorts of tea; that of this quantity one-half consisted of green teas and the other half of blacks; that of the blacks the greater part were Oolongs—a blackish leaf with a flavor and infusion resembling green tea; and that almost all this supply then came from China alone.

At that time the quality of Chinese green teas was generally good, and liberal prices seem to have been paid for it both in China and in America. Soon after 1872, however, Japanese tea sprang into favor, and, its qualities being like, but better than, those of Chinese green tea, the latter soon began to lose ground both in consumption and in value. As a consequence, the export of green teas from China declined, and low prices led the Chinese gradually to lower the quality of their product, until at the present time comparatively few really good green teas go from China to America, while the total export is hardly as great as it was in 1862. In the mean time, too, Formosa has supplied a new Oolong tea of rich and fragrant quality, which contributed to turn the American taste away from Chinese green teas. This new supply did not, however, retard the growth of the demand for Japanese tea. For the latter, being carefully prepared by the producers, and being nicely packed and shipped in its natural state by the foreign exporter, had taken firm hold of the American taste.

Not even the superior attractions of Japanese natural leaf greens and Formosa Oolongs could, however, persuade American tea-drinkers greatly to increase their annual rate of consumption. About one and a quarter pounds per head of the population was the rate of consumption twenty years ago, and that rate seems still to govern the trade. In England low prices have raised the annual rate to four or five pounds per head; but in America price seems to have no influence. Tea is used only at the evening meal, and it has mattered little what it cost. For during these twenty years the price in America has fluctuated enormously. In 1862 a duty of 20 cents per pound brought the selling price of medium quality Japanese tea to 65 cents. In 1872 duty was removed, and the price was 42 cents. In 1882 the price fell to 20 cents. Yet all through these great changes the rate of consumption remained about the same.

It is true that since twenty years the population of the United States has risen from 30,000,000 to 50,000,000, and, consequently, more tea is consumed now than then. But the *rate* of consumption is still only about one and a quarter pounds per head, although the price now is less than a third of what it was in 1862. It is evident, therefore, that low prices have little effect on the consumptive rate of tea.

This controlling rule of the trade is what exporters from China and Japan appear to have overlooked in their recent operations. For we find that shipments to the United States in the season 1881–'82 were as follows:

	Pounds.
From China, green teas	20,700,000
From China, black teas	24,200,000
From Japan, green teas	34,600,000
Total	79,500,000

and that this total was, according to the last New York reports, from 10,000,000 to 15,000,000 pounds more than the country required.

It ought not to surprise any one that ruinously low prices resulted from such a surplus of a perishable article, the annual crop of which is so sure as that of tea is admitted to be.

It is hardly to be doubted, then, that excessive supplies have been the chief cause of the present very low prices, and that, to raise the price, the first thing to be done is to reduce shipments from the East to America to about one and a quarter pounds per head of the population.

It seems likely that China will shortly do her part in this reduction, as it is hardly possible for the Chinese to produce green teas profitably at present prices, and the production of good Oolongs in Formosa appears to be now less easy than it was formerly. We may, then, reasonably expect a decline in the shipments from China to America.

As to the production of Japan, one cannot make the same calculation. It has slightly fallen off of late; but as the effort to tap new markets by converting part of the crop into black tea has had little success, while the culture of the shrub has not diminished, it is probable that a full supply of Japanese tea will be always obtainable, and that America will continue the only foreign market where this tea is wanted.

To ameliorate the trade in Japanese tea, there seems to be only one course open, which is to improve the character of the crop in such manner that a better quality, and *therefore a smaller quantity*, shall be brought to market. If such an improvement is possible it ought to be begun without delay.

It is undeniable that the average quality of the tea exported from Japan has of late years greatly deteriorated. When the trade first began, and for some years afterwards, Japanese teas were generally of very fine quality. They were not as strong in the cup as Chinese teas, but they were so nicely prepared and of such delicate fragrance that consumers in America took a great liking to them.

In these earlier years of the trade, however, only the finer grades of tea were exported and all the teas were shipped in their natural condition. The foreign merchant was obliged to refire them (owing to the imperfect curing and packing of the producers), but he merely recured and repacked them, leaving the long and wiry leaf with its natural olive color. It was chiefly on account of their being in this natural condition that Japanese teas became popular in America; and that the same teas are still wanted there, is shown by the eager demand and full prices every year obtained for finer products of the early pickings.

But as the trade grew, both native producer and foreign buyer began to disregard this distinguishing merit of the Japanese leaf. For the sake of greater or quicker profit the producer no longer confined his pickings to the delicate spring leaves, but tore from his shrubs all through the season everything that could be manufactured into the semblance of tea, and reduced his manipulation to a minimum. On the other hand, the foreign buyer, finding that the greater part of the teas offered to him no longer possessed the fine color and handsome appearance of former times, resorted to factitious methods of making this poor stuff seem better than it was, and by ruthlessly mixing the products of different localities, by breaking up the leaves into small pieces, and by covering the whole with an artificial color, he sought to conceal the inferiority of his purchases and to impose on the unsuspecting consumer in America. Both parties thus did their utmost to spoil a valuable trade, and they were heartily seconded in their wretched work by the New York brokers, who found in these garbled teas a means of preserving their own importance as experts, since it was impossible for any unskilled person to determine the value of an article so utterly denaturalized.

By these various means Japanese green teas have gradually lost their former distinctive characteristics and value, and the American market is now surfeited with trash which is no better than the average Chinese green tea, and has little advantage over it in the eyes of any consumer. And this is unfortunately true, not merely of the lower grades of tea, but, to a great extent, of the higher grades also. For the coloring process once begun was soon extended to all grades, and to-day nearly every pound of Japanese tea shipped to America is subjected to the disgusting operations which one may any day see in the tea-firing houses of Yokohama and Kobe.

It is not surprising that American consumers should revolt from an article so manipulated, and should prefer coffee or any other beverage to the infusion of tea leaves converted from a dirty brown or yellow into a dingy blue or greasy gray color by means of ultramarine or indigo, mingled with gypsum or soapstone, and the whole mass flavored with the perspiration which drops abundantly into it from the filthy and oftentimes diseased work people who, for hours together, in a high temperature, turn the tea in the pans. Nor is it marvelous that they will not pay good prices for teas so treated. What is astonishing is that the Americans, who are generally supposed to be rather fastidious as to their food, should ever swallow an infusion of such foul and indigestible ingredients, and one can only account for their so doing to the extent of one and a quarter pounds per head per annum, by supposing that the consumers of tea are in lamentable ignorance about it, and are easily deceived by the dealers in it.

But it appears now that the public attention is being drawn to this subject, and that some perception of the foul frauds practiced upon consumers of tea is having its effect on prices, and upon the use of tea in America. An article which we recently reprinted from the New York Current plainly points in this direction, and it is noteworthy that, although the total exports of tea from China and Japan have this season been considerably less than usual, the price of tea in New York is lower than ever.

Now, the American people are probably under the impression that it is only "the tricky Japanese" who, to quote the article we have mentioned, "foist this trash" upon them under the guise of tea, and are far from imagining that the foreign merchants in Japan have any hand in the fraud. It is full time, however, that the truth in this matter should be clearly proclaimed. The Japanese producer is no doubt the original sinner, in bringing bad tea instead of good to market; but he, at least, delivers his rubbish to the foreign merchant in its natural state: and it is to their foreign agents alone that the American people are indebted for the conglomerate of tea leaves and pigments, saturated with the sweat of unclean laborers, which is thrust upon them under every attractive title unscrupulousness can suggest, and is sold in New York as "pure Japanese tea."

It may be, and we are assured it is, the case that some of the foreign shippers of tea have protested against this maltreatment of a leaf which is one of the most precious of Nature's gifts to man, and have only adopted it under the stern compulsion of reckless competition. But whatever extenuation their reluctance may afford to the character of their proceedings, it is none the less true that it is the foreign shipper, rather than the Japanese producer, who is directly responsible for the shameful imposture we have described.

We admit, however, that any reform in the business must begin where the first departure from honest dealing began, that is to say, on the Japanese side, and that the foreign merchants, having once embraced this vicious system, and having now either to obey the orders of their principals in America or to abandon their business, cannot be expected to sacrifice their livelihood for the benefit of the tea-growers or for any sentimental reason.

The Japanese are fortunately in a better position for dealing with the subject, since not only do they control the production, but it is unquestionably for their advantage that all this fraudulent nonsense which has demoralized the trade should be swept away, and that the teas of this country should be restored to their former purity and excellence, in order to be also restored to their former value.

We have already said that, in our view, the only way to ameliorate this trade is so to improve the character of the crop that a higher average of quality, *and therefore a smaller quantity*, of tea shall be offered for sale to foreigners; and we have intimated that, as the Japanese alone control production, it is also in their power to put an end to the absurd, filthy, and falsifying processes through which tea passes in the refiring establishments of Yokohama and Kobe.

That either reform is easy we will not pretend to say; but we are persuaded that both are possible to any earnest and strong effort, and that neither can be neglected without further loss to all concerned.

Already there is some discussion among the tea growers about improving their product, and it is to be hoped that it may have greater practical results than similar discussions have had in former years. If it does not, producers are but too likely next season to suffer in price for their procrastination. On the contrary, if it leads to action the gain may possibly be immediate. For the reduction which has this season taken place in the total shipments of tea from China and Japan to the American market will dispose that market to respond favorably to any healthy movement here.

With regard to the preparation of the leaf the Keizai Zasshi (in an article lately translated by the Japan Herald) strikes a true note in suggesting that all that is now done at the foreign establishments in recuring and repacking tea could be done as thoroughly and more cheaply at the seats of production in the interior; and that proper and complete curing and packing there would be greatly to the advantage of the tea itself, which too often now reaches this market in poor condition.

We have often wondered that Japanese tea growers should prefer to half cure their tea when they must know that for transportation over sea it needs to be thoroughly dried; that they should persist in packing even fine tea in such flimsy and badly-closed boxes that it must deteriorate on its way to market and while kept in the humid air of the ports; and that they should, one and all, be so completely indifferent to their individual reputations as to be content to see their names or trade-marks ignored by buyers, and their teas bulked, and mixed, and wholly changed in appearance in the foreign godowns.

The Chinese have always shown, in this respect, far more shrewdness and intelligence. For they not only fully cure their teas in the country, but also there prepare and pack them for export, and see that the particular "chop" of the manufacturer is on every box, so that any special skill or care he may have bestowed on his tea shall tell in its favor, and induce a special demand for his "chop" year after year.

In Japan this means of enhancing the value of tea has apparently been quite neglected, and, in consequence, producers who perform their work well and creditably are no better known to foreign buyers than those who do it badly and dishonestly, while the benefits of honorable emulation among them are wholly lost. Were the teas packed in the country ready for shipment this could not be the case, as the buyer would then be obliged, in his own interest, to take notice of brands which turned out well, and to give such brands a preference.

Now all that foreigners at the ports do towards any real improvement of the condition of the tea could be better and more cheaply done by the Japanese producer. There is no mystery about the operation. It consists mainly in equalizing quality by bulking the tea; in thoroughly expelling all moisture from it by roasting it in iron pans; and finally in packing it, while still warm and dry, in lead-lined air-tight chests of suitable size. Anyone of ordinary intelligence can easily perform all these processes. Good faith in regard to uniformity of quality and regularity of weight is the only special condition necessary. That essential loyally observed, tea packed in the country would be equal, and possibly superior, to tea packed at the ports, and could not fail to find ready sale as soon as buyers learned to trust it. Some buyers would even prefer to have their teas thus brought to market ready for shipment, and those who might at first oppose so reasonable a change would finally be compelled to accept it.

We say that all that foreigners at the ports do towards really *improving* the tea could be done to greater advantage in the interior. No doubt, also, all that foreigners do towards sophisticating and debasing it could equally well be done by the native manufacturer, and, if he is not maligned, this latter operation would not be wholly repugnant to his habits, albeit he has not heretofore practiced just that form of deceit.

We are strongly of opinion, however, that he would do far better, and ultimately gain much more, by letting this part of the business alone, refusing to imitate the falsifying practices of the foreign merchant, and endeavoring, by careful conservation of the natural color and character of the fragrant leaf, to restore to the teas of Japan the good name they formerly and justly enjoyed in the American markets.

At first the native packer of honest tea would no doubt encounter some opposition. The vested interests of foreigners in their costly establishments would naturally array many of them against him, and the brokers of New York and Chicago might try to discourage him by insisting that the American consumer could only be satisfied with tea colored with indigo or ultramarine, loaded with soapstone or gypsum, and flavored with the transpirations of the firing women of Yokohama and Kobe.

We venture to assert, however, that if the American consumer were fully apprised of the facts of the matter, and frankly offered a choice between the objectionable compound now sold to him as Japanese tea and the natural leaf nicely prepared and packed, he would soon decide in favor of the latter. It is only because he is ignorant of the nature of what he drinks under the name of tea, and because he is so misled by so-called experts, that he accepts the adulterated article. We have shown that he is not unwilling to pay a good price for good tea. Let him now learn how to get something pure and wholesome, instead of the colored stuff which he has heretofore had to swallow, and he may be depended on to give his hearty support to a reform in the business.

It may take some time and demand much systematic effort to effect this reform; but that it can be effected, and that it is clearly in the interest of both producers and consumers of tea to have it effected, we have no doubt whatever.

The bill now before the American Congress to prevent the adulteration of articles of food, should, if passed, work in favor of pure teas. But law alone will not suffice to produce the reform desired. Public interest must be enlisted in the matter, and the tea growers of Japan, whose industry is menaced by the malpractices which have crept into it, should exert themselves to awaken that public interest, to save their trade, and to correct the abuses which are now bringing it to ruin.

If they can muster courage, energy and unanimity enough for this undertaking we believe they will entirely succeed in it. If they remain supine about it, we shall expect next year to have to chronicle a still worse condition of the trade than that which gloomily closes the season of 1882–'83.

JAPANESE TEAS.

[From the Japan Gazette of May 3, 1883.]

The prospects of the coming tea season are gloomy enough. Bad business in all directions is reacting, as is natural and inevitable, on domestic industries. Tea in particular is feeling the depression consequent upon years of dishonest dealing, and the outturn of this season's crop promises to be most disappointing. A correspondent of the Mai Nichi Shinbun furnishes some useful information on this subject. He says that the prices which ruled at the opening of last season were, owing to competition, from $44 to $48 per picul according to quality; but this year there is an absence of competition, with the result that so far no foreign merchant has made an offer for the new crop, not even for one catty; and the prices spoken of are between $28 and $33 at the best. To still further reduce the home value of this low price in comparison with that of last season, the exchange for dollars has fallen and the anticipated loss of tea producers is very heavy. If the total quantity of tea produced throughout the country be estimated at 40,000,000 pounds the aggregate loss will probably exceed 6,000,000 yen currency.

Some useful calculations are then given respecting the cost of production of tea and the margin left to producers. One *tan* of land (=0.248 acre) produces about 125 kwanme (= 1,035 pounds) of green leaves. The cost of gathering this quantity is yen 7½. Preparing the leaves, cost of charcoal used, &c., yen 18. Manuring and preparing the land yen 15. In all yen 40.50. The result is 25 kwanme (= 207 pounds) of salable tea, costing for cultivation and preparation yen 1.62 per kwanme. At $30 per picul and with exchange at 130 the proceeds amount to yen 2.437 per kwanme, from which must be deducted commission, carrying expenses, &c., about 24 sen, leaving net result of sale yen 2.19 per kwanme, and less cost of production yen 0.57 per kwanme. This is what remains for the reimbursement of the land owner, and assuming the value of one *tan* of land to be 150 yen, the return falls short of 10 per cent. per annum.

This result, although not very gratifying, is far from being ruinous to the grower of tea; while labor will be as fully employed as heretofore. Against the discouraging result of this season must be set the large profits of last season. Thus if $30 and 130 exchange yield only about 10 per cent. on the capitalized value of land, $44 and 160 exchange gave 46 per cent. Japanese producers of tea and silk will have sooner or later to realize the stern fact that the days of high prices and large profits are over. The competition which used to rule here among foreigners is fast coming to an end; and the feeling is growing that, as in the purchase of imports Japanese combine to prevent the foreign merchant from realizing anything but continued losses, it has become necessary to insure a profit on the export trade or discontinue business with Japan altogether. This is the conclusion to which respectable merchants have come; we do not refer to the hangers on of merchants and the second class of foreign traders, content with such peddling business as Japanese may give them, but houses of standing and capital. They are convinced at least that the heavy losses on tea and silk of the past few years have not arisen from the abnormally low prices on the consuming markets abroad, but are due entirely to the excessively exorbitant prices paid to the producers here. Those days we hope and trust are over, and a more prudent policy will prevail. There may be large demands as of yore and prices may receive a sudden impetus; but these will only be transient. A calmer era of business will succeed the heavy losses which have fallen upon many honorable men and rendered the best years of their lives fruitless.

In the midst of the gloom which surrounds the unhappy tea producers, we may be pardoned for suggesting that an avenue of escape is yet open to them. Now that combinations and monopolies have broken down, as they must always eventually do, and the greedy foreigner (who has for years deprived Japan of her commercial right and appropriated all the *losses* which should otherwise have fallen upon Japanese) is emancipated from a species of dictation as contemptible as offensive, the remedy so long held *in terrorem* over the resident merchants, to whom Japan owes every particle of such commerce as she possesses, may be again applied. *Direct export* is the remedy. Sell the tea to official and semi-official companies, or ship it away directly to the United States, and submit your idle vaunting about direct trade to a practical test. The time is not far distant when Japanese will begin to reap some of the fruits of their treatment of foreigners; of their haggling and scheming for huge profits on a petty and stagnant trade; of their general incapacity, distrust and conceit. It is right there should be a little understanding on these points. Officious and meddlesome interference with trade by persons whose association with it is fatal has done the mischief most to be dreaded; and now Japan will find herself left in the lurch with nothing to trust to but a forced resort to the fulfillment of her oft-repeated threat of direct export.

PATENT LAWS OF MEXICO.

REPORT OF CONSUL SUTTON, OF MATAMOROS.

I have the honor to inclose herewith a translation of the laws of Mexico, relating to the issuing of patents, and comments thereon.

I have thought that such information might be of interest to a considerable class of Americans.

I had much difficulty in finding this law and am indebted to the Sig. Adalberto Torres for the loan of books to make a written copy of the Spanish original. Not having any printed copy, I only mail you the translation.

WARNER P. SUTTON,
Consul.

UNITED STATES CONSULATE,
Matamoros, March 13, 1883.

THE PATENT LAWS OF MEXICO.

[Translated and forwarded by Consul Sutton, of Matamoros.]

SUMMARY.

The patent laws of Mexico are based upon the law of May 7, 1832, modified by the law of July 12, 1852, and the decree of September 28, 1843.

Duration of patent is ten years, of improvement thereto six years. The duration of a patent of introduction is limited by the concession granted by Congress.

The time for beginning the working of the patent and time of forfeiture in default thereof is to be fixed in each patent.

Documents must be in Spanish and are:

1. Petition.
2. Designs or models in duplicates, and what is judged necessary for explanation of what is proposed.

Government will not inquire as to usefulness of any invention.

Extensions only given by Congress.

Expenses from $10 to $310.

Patent of introduction is obtained by petition to the Government and act of Congress.

LAW OF 1852.

Regulations for the better observance of the law of May 7, 1832.

ARTICLE 1. The inventor or perfector of any industry to make use of the right given by article 2 of the law of May 7, 1832, shall present to any of the authorities named by the said article, his petition (*solicitud*) accompanied by duplicates of his designs (or models) and what is judged necessary for explanation of what is proposed.

ART. 2. Every petition made according to the previous article shall pass immediately after its first publication for the information of the directing committee of industry which shall extend that which it may deem proper within the term specified by article 4 of said law.

ART. 3. The directory shall give information upon those points which are comprehended under article 6 of said law.

ART. 4. If before the term specified in article 4 of said law expires there should be any opposition, the directing committee shall hear verbally the interested parties and consult with experts on doubtful points according to right, and shall obtain an agreement between the parties, provided that it does not prejudice the public interests nor conflict with the laws. If the parties should agree, an act shall be made signed by the president and secretary of the committee showing the agreement made. The directive committee shall send it to the Government with the proper information.

ART. 5. If no agreement be arrived at, the directive committee shall send the papers in the case to the Government, giving its opinion upon the controverted point.

ART. 6. Providing that the opposer shall found his objection upon an alleged better right to the privilege which is asked, because personally it may have been conceded to him and guaranteed by the issue of the respective patent, the Government shall examine the opposition and within thirty days grant or deny the patent which is solicited, the rights of the party who considers himself injured remaining in full force, in order that he may use them before the competent federal courts according to law.

ART. 7. Should the dispute turn upon the possession or ownership of the privilege, or this should be impugned for the reasons expressed in the 16th article of said law, the judicial notice shall be passed to the competent federal tribunal, in order that, the parties being heard according to law, it may decide the contest. The party gaining the case shall present testimony of the sentence given, that it may, passing to the directing committee of industry, inform it with reference to the concession of the decision, if the judicial decision shall have been favorable to him who asks it.

ART. 8. If the opposition should be founded in that the privilege cannot be conceded according to what is provided in article 6, or that the innovation or perfection is not a matter of privilege on account of being comprehended in article 10 of said law, the Government shall decide upon the concession, and from the decision made there shall be no opportunity for judicial recourse; provided, that the opposition is founded upon the mentioned article 6. But if it should turn upon the application of article 10 and the Governmental decision should concede the patent, there will remain in force the judicial recourse to him who may consider himself prejudiced.

ART. 9. The competent federal tribunals upon the petition of the attorney-general, in default of a party who should make the decision, shall declare the nullity of the privileges comprehended in articles 10 and 16 of the law of May 7, 1882. The attorney-general cannot take this public action unless directed by the Government.

ART. 10. The Government, upon issuing the patent mentioned in article 5 of said law, shall return one exemplar of the designs, models, and descriptions, which, according to article 1 of this law, must accompany the petition in duplicate; this exemplar, if it be design or description, will go signed by the chief clerk of the ministry of relations; if it be a model, which cannot be written upon, there shall be placed a suitable mark or sign, making written note of this fact on the patent, as also of the return of the duplicates. In the cases comprehended in the article 18 of the law of May 7, 1832, the signatures and signs shall be placed on the cover of the box that contains the designs, plans, &c.

ART. 11. The patent of which the previous article of the said law speaks forms the title of privilege, and when produced to establish or defend a right, shall be exhibited therewith the designs, descriptions, or models authorized in the form provided in the previous article.

ART. 12. The concession of a patent does not guarantee the utility of the invention or perfection, nor prejudge (*prejuzga*) the questions relating to it which may arise.

ART. 13. A copy of this law shall accompany every patent issued hereafter under seal of the ministry of relations, stamped over wafer.

Mexico, July 12, 1852.

RAMIREZ.

Law of May 7, 1832, for the observance of which is issued the preceding law.

EXCLUSIVE PRIVILEGES IN THE BRANCHES OF INDUSTRY.

ARTICLE 1. To protect the right of property of inventors or perfectors of any branch of industry, exclusive right is given them that they may use it in all of the states of the federation for the time and under the conditions that are expressed in this law.

ART. 2. He that invents or perfects any industry in the Mexican Republic, if he wishes the Government to secure him the possession thereof, shall present to it or to the city council of the place in which he desires to establish his project, or to that of his residence, or to the governor of the State or territory to which that place pertains, the exact description, accompanied by the designs, models, and as much more as it is judged necessary for the explanation of the object that is proposed; and these authorities are obligated to give him a legal instrument after the form of model number one.*

ART. 3. The local authority, in case the undertaker (*empresario*) should not have presented himself directly to the governor of the State, is obliged to remit to the latter the papers in the case with all the documents, and the governor shall decide, and in case the undertaker (*empresario*) may not concur therewith, shall forward it by the first regular mail to the ministry of relations.

ART. 4. Being before the General Government a petition to obtain a patent, its publication shall be ordered for three times in the newspapers, and a term of two months conceded, counting from the first day of publication, that opposition may be made by any who may desire to allege right of preference.

ART. 5. The General Government by means of the secretary of relations will issue to the perfector or inventor a patent according to model number two.*

ART. 6. For the concession of the patent of which the previous article speaks, the Government should not examine whether or not the invention or perfection is useful, but only if they are contrary to security and public health, to the good customs of the laws, or to the orders and regulations, and not being so, it cannot deny the protection that should have been solicited.

ART. 7. Patents of invention shall have force and vigor during ten years, and those of improvement during six, counting from the date when the privileged project should have been established in any part of the republic.

ART. 8. A project of invention or improvement is understood as established from the date of the day the patent is issued.

ART. 9. When an inventor or perfector desires that his privilege be not exclusive in respect to more than one State, he will apply for the concession to the authorities of the same.

ART. 10. When any one has obtained privilege for an invention or improvement that is already established without patent to anybody, the privilege shall be lost, although it be not claimed by the party owning the invention or perfection.

ART. 11. When the invention or perfection be of such nature that it may be maintained in secret, and the inventor or perfector has asked the privilege, the term of the privilege being expired, he must make it public.

ART. 12. A patent being issued in favor of an invention, if privilege of perfectin it be solicited, the privilege given to the improver will not t the rights of th ventor without prejudice to the arrangements which make.

ART. 13. When the inventors or perfectors desire for a lo than that expressed in article 7, they will apply t ment, report will give account to Congress.

ART. 14. The inventors or perfectors shall not ec privileged until they have obtained from the General Government the patent which establishes their title.

---

* Model not given. Se

ART. 15. In case of dispute over the possession of an invention or improvement, it will be decided by the common laws.

ART. 16. When it is proven that the privileges have been obtained in bad faith, making pass for invention or improvement that which is no more than introduction, the patent which has been solicited shall lapse.

ART. 17. The Government shall make public in the Gazette the concession of each patent immediately as they are issued, and designate a convenient place where the designs, plans, and models named in article 2 may be opened to public inspection.

ART. 18. When the invention or perfection must remain secret, the designs, plans, &c., shall not be published until the expiration of the term of privilege.

ART. 19. The fees of a patent will be from ten to three hundred dollars.

ART. 20. At least one-half of the persons that are employed by the workers of the patent in the mechanical labors must be actually natives of the United Mexican States, if it be possible.

ART. 21. The introducer of any branch of industry that in the judgment of the General Government is of great importance will be able to obtain exclusive privilege, applying through the General Government to the General Congress.

Issued through the ministry of relations this day and proclaimed the 14th.

The models to which this law refers are not included in the collection of decrees. The insertion of the following is therefore convenient:

Decree of September 28, 1843.

VALENTINE CANALIZO, &c., &c., &c.:

Be it known: That to avoid the serious damage that may result from an invention or improvement not being put in operation in an indefinite term, after having obtained the exclusive privilege, and the resulting damage to another individual who might establish the same invention, introduction, or improvement in less time; and using the powers with which the supreme executive power is invested by the basis agreed upon in Tacubaya and sanctioned by the nation, I have deemed fit to decree in cabinet meeting the following:

In every patent of exclusive privilege which is issued a prudent term shall be fixed within which the use of the privileged object shall be established or commenced, and if not accomplished in said time the privilege will be held to have expired, and free action granted to any other individual to apply for it again.

(This decree is not included in the collection of the same class formed by Lara.)

FOREIGN COMMERCE OF GUATEMALA.

REPORT BY CONSUL TITUS, OF GUATEMALA CITY.

From the report of the secretary of the treasury of this republic to the National Assembly which has just closed its sessions, I extract the principal portion of the following items of possible interest concerning the foreign trade of Guatemala during the year 1882. The total value of the exports of this year is $3,719,209.97, showing a decrease of $365,138.88 as compared with 1881. In fact there has been a steady decrease in the value of exports for the last four years, as will appear from a statement for several years, viz:

1878	$3,918,912 32
1879	4,605,633 77
1880	4,425,336 57
1881	4,084,348 85
1882	3,719,209 97

The whole of this falling off, however, should not be attributed to a diminution in the actual amount of exports, as the progressive decline which has taken place during the last few years in the value of coffee, which is the principal article exported, is sufficient to account for a considerable portion of it.

The principal articles exported during the year, and their values, are as follows:

Coffee	$3,132,715 60
India rubber	224,890 25
Sugar	82,485 06
Woolen cloths	22,935 00
Timber	24,505 32
Hides and deer-skins	129,566 10
Sarsaparilla	12,896 85
Cochineal	11,868 50

The imports for the same year amount to $2,254,573.86. Subtracting the specie included in this amount leaves $1,843,262.30 as the net imports of merchandise.

Subtracting also the specie included in the exports leaves the sum of $3,674,454.58 as net exports. This gives a balance of trade in favor of Guatemala of $1,831,192.28, from which it appears that the country sold just about double the amount it purchased.

This state of affairs, of course, causes exchange to be generally at a discount, and accounts for the heavy "losses by exchange" sometimes in the sale of drafts here, and of which our treasury officials seem at times inclined to complain.

On these $1,843,262.30 of net imports, duties were collected to the amount of $1,679,047.93, or over 91 per cent. of the original value.

I inclose a tabulated statement of imports from England, the United States, France, and Germany, a slight examination of which will disclose some not very flattering facts concerning our trade with this republic as compared with that of other countries.

This statement shows the total of import from the United States to be $380,542.94, or substracting $136,725.37 in specie leaves $243,817.57 of imports, against $1,116,321.94 sold to us, leaving a balance against us of $872,514.27.

The amount of exports to the United States is taken from the records of this consulate.

Comparing our trade with that of the three countries mentioned, omitting the specie in each case, and further deducting from the imports from the United States the amount for wheat, flour, and kerosene oil, in which, from the necessities of the case, we have no competition whatever, the trade as regards articles with which competition is possible stands as follows:

United States, $54,507.11; Germany, $297,469.75; England, $901,216.

Here we make a very poor showing. As to the causes of this state of affairs, they are sufficiently detailed in my No. 47, which was published in the "Commercial Reports" of November, 1881, No. 13. I know of nothing to add except that our merchants do not *advertise* sufficiently.

It seems to me that with a little judicious advertising, in spite of the disadvantages enumerated in the above-mentioned dispatch, we might do better, in the item of cotton goods, for example, than $4,000—as compared with $12,000 from Germany, $28,000 from France, and $725,000 from England.

FRANK H. TITUS,
Consul.

UNITED STATES CONSULATE,
Guatemala, *May* 25, 1883.

Statement showing the imports into Guatemala from England, the United States, France, and Germany.

Articles.	From—			
	England.	United States.	France.	Germany.
Books		$1, 672 25	$4, 128 75	
Boots and shoes	$1, 132 87	586 52	3, 089 67	$800 31
Canned goods, cinnamon, beer	4, 758 36	8, 374 75	8, 535 75	14, 268 29
Carriages		3, 550 00		
Cloaks, hats, ready-made clothing		3, 460 82	11, 949 26	
Cotton goods and thread	725, 529 62	4, 224 84	28, 765 20	12, 748 59
Drugs and medicines		10, 834 18	18, 324 59	11, 208 40
Earthenware, window-glass, hardware	15, 827 89	4, 629 48	9, 458 34	8, 694 37
Firearms		1, 095 00		
Flour		132, 814 48		
Furniture				1, 075 39
Iron and ironware	53, 956 48	6, 954 28		12, 130 85
Linen goods	11, 649 35			
Lumber		3, 957 49		
Machinery, iron roofs, &c	40, 287 57	5, 177 39		6, 794 50
Matches				694 74
Mirrors, jewelry, watches			37, 488 36	28, 463 19
Money	60, 388 00	136, 725 37		89, 791 00
Paper			14, 829 78	9, 957 35
Pianos			3, 250 00	4, 585 65
Perfumery			4, 126 91	974 23
Petroleum, gasoline, naphtha		12, 736 23		
Sacks (empty)	21, 495 84		4, 854 20	2, 826 16
Saddles				3, 758 30
Silk goods			40, 295 76	5, 468 08
Skins (cured)			21, 472 83	
Stearine in candles, &c			10, 951 22	4, 017 07
Toys				2, 152 83
Wax (white)				2, 155 20
Wheat		43, 749 86		
Wines, liquors, beer, oil			25, 185 58	10, 893 25
Woolen goods	26, 578 52		50, 763 55	13, 016 25
Total	961, 604 50	380, 542 94	297, 469 75	246, 874 00

THE MINES OF VENEZUELA.

BY CONSUL BEACH, OF PUERTO CABELLO.

The domain of Venezuela has never been thoroughly explored, and even the approximate extent of its mineral resources has never been ascertained. However, sufficient has been learned to establish ground for belief that it contains great mineral wealth. The predominating rocks of the mountains are of the shale order, each formation of diversified colors, and all darkish, except thin layers of flint. The softness of the rocks has led to their decomposition on the surface, one result being that nearly all the mountain surfaces are composed of a soil sustaining a vegetation more or less luxuriant, while the valleys are exceedingly fertile. The explorations as made for minerals show that nearly every kind abounds in some degree, and several kinds in quantities that pay for mining. I will consider them in the order of their value so far as facts have been ascertained relating to production.

1. Gold produced to the extent of about $500,000 per year. Some of that produced is the richest free gold in the world.

2. Copper, 32,000 tons of ore produced in 1882, which was shipped to England. On an average the ore contains about 30 per cent. of copper.

3. Silver, produced on the Orinoco River, near Bolivar, and at Carupano, 250 miles east of La Guaira. The mining is conducted by citi-

zens of the United States. Operations at Carupano are to be extended the present year.

4. Lead has been found at several places, and in quantities for profitable mining.

5. Aluminum is found in considerable quantities in connection with other metals.

Iron is found combined with other metals, and doubtless exists in a separate condition. There have been found in small quantities antimony, zincblende, nickel, mica, and vanadium. Bituminous coal abounds in sufficient quantities to make its mining profitable, though as yet it has not been prosecuted. From near Maracaibo a considerable quantity of asphaltum has been produced and shipped abroad, and it is known to abound at other places, but whether in quality and quantity to make its mining profitable, is to be determined by experiments now being made.

Guano to the extent of about 25,000 tons was shipped from the Orchilla islands in 1882, and all to the United States. New guano fields are reported, but their working value has not been determined.

The Venezuelan Government maintains a right to all minerals found within the national domain, and all mines are worked by the payment of a royalty to the Government, the percentage being a matter of agreement. The mineral product for 1882 is estimated at $1,000,000, which I judge is not far out of the way. The amount and value of production is likely to be somewhat increased during the present year, chiefly through outside enterprise.

HORATIO N. BEACH,
Consul.

UNITED STATES CONSULATE,
Puerto Cabello, February 8, 1883.

MEXICAN EXPORTS.

REPORT BY MINISTER MORGAN.

I forward herewith copy and translation of the report of the Department of Hacienda and Public Credit of the exportations from the Mexican Republic during the second quarter of the fiscal year 1882–'83, which has just been transmitted to me.

P. H. MORGAN,
E. E. and M. P.

LEGATION OF THE UNITED STATES,
Mexico, June 29, 1883.

Exportations from the Mexican Republic during the second quarter of the fiscal year 1882–'83.

Henequen:		
Hammocks	$23,500 00	
Cordage	16,073 00	
Raw material	643,205 88	
		$682,728 88
Tanned hides	9,022 21	
Goat hides	186,020 35	
Beeves' hides	201,781 34	
Deer hides	30,515 20	
Other animals' hides	1,160 49	
		428,499 59

Building material	22,929 00	
Common wood	284 50	
Fine wood	62,166 15	
Mulberry wood	44,190 61	
Dyewood	184,884 16	
		314,554 42
Coffee		209,514 45
Maguey fiber:		
Hammocks	$90 00	
Cordage	1,167 50	
Raw material	182,580 89	
		183,838 39
Live animals:		
Asses	38 00	
Horses	24,416 00	
Swine	604 00	
Sheep	3,968 00	
Mules	1,323 00	
Cows	81,143 00	
Various	50 00	
		111,542 00
Tobacco:		
Worked	47,822 50	
Leaf	10,973 00	
		58,795 50
Vanilla		50,127 00
Archil		40,410 00
Caoutchouc		36,974 92
Sugar		36,482 08
Pearl shells		31,840 00
Fruit		23,284 27
Lead		19,069 00
Maize		17,812 00
Herb roots		16,419 08
Sheaves of maize		14,387 30
Bees' honey		14,021 25
Sarsaparilla		13,042 17
Istle		11,931 35
Pearls		11,000 00
Mexican beans (*frijol*)		10,579 02
Flour made from wheat		7,400 00
Loaf sugar		5,605 47
Cathartic medicine		5,259 00
Pepper		3,777 45
Manufactories		3,717 00
Paper money		3,184 00
Common marble	$2,405 00	
Tecali marble	340 00	
		2,745 00
Fiber of stucco		1,820 00
Drugs		1,717 00
Bones		1,674 25
Chick-pea		1,506 00
Unsalable merchandise returned		1,395 00
Horns		1,383 00
Medicinal drugs		1,342 62
Barley		1,270 70
Equipages		1,202 00
Grain		1,200 00
Vegetables		1,073 62
Bronze		984 00
Earthenware		867 12
Copper	$86 00	
Copper ore	780 00	
		866 00
Furniture		710 00
Live plants		580 00
Pitch		623 52

Spirits:		
From the sugar-cane	$35 00	
Mescal	396 00	
Grape	90 00	
		521 00
Hats		519 00
Sugar-cane		503 50
Nacre shells		500 00
Rags		489 20
Cascarilla bark		369 00
Comfitures		367 50
Flour made from maize		352 00
Lentils		300 00
Ornaments		300 00
Empty barrels		300 00
Machinery		290 00
Cocoa		262 75
Saddles		248 00
Pasture		234 00
Objects of natural history		221 00
Common paintings		192 00
Wheat		185 50
Soap		184 00
Cloth figures		175 00
Cheese		164 00
Straw mats		150 00
Feathers		142 00
Chocolate		128 00
Tortoise shells		120 00
Whiting		110 00
Shrimps		103 00
Beans		96 00
Printed books		91 13
Cotton		90 00
Lime		74 00
Maps		65 00
Salt meats		58 00
Provisions		57 00
Lemons		45 50
Seeds		43 00
Indigo		35 00
Petroleum		20 00
Medicinal herbs		16 50
Damiana		15 00
Chia		10 00
Photographs		10 00
Bran		6 50
Rice		3 50
Various articles		1,211 65
Total merchandise		2,398,123 65

PRECIOUS METALS.

Coined silver	$7,662,489 89	
Bar silver	1,254,515 08	
Silver ore	147,942 32	
Silver (sulphuric ore)	44,001 88	
Small ore	22,008 62	
		9,130,957 79
Coined gold	124,009 00	
Bar gold	122,614 87	
		246,623 87
Foreign coined silver		33,280 39
Foreign coined gold		55,136 54
Total precious metals		9,465,998 59

Amount exported from each custom-house.

Port.	Precious metals.	Merchandise.	Total exportation.
Vera Cruz	$6, 746, 900 04	$569, 673 69	$7, 316, 578 73
Mazatlan	1, 336, 655 11	34, 566 65	1, 371, 221 76
Progreso	52, 894 00	712, 884 18	765, 778 18
Tampico	244, 867 00	201, 025 23	445, 892 23
Monterey-Laredo	179, 129 03	185, 312 44	364, 441 47
Paso del Norte	244, 901 60	16, 676 00	261, 577 60
Manzanillo	164, 672 00	15, 780 00	180, 452 00
Matamoros	78, 876 00	84, 986 18	163, 862 18
La Paz	123, 785 32	39, 033 00	162, 818 32
Isla del Carmen	20, 891 00	131, 861 07	152, 752 07
San Blas	121, 404 76	9, 222 50	130, 627 22
Tuxpan	....	60, 786 92	60, 786 91
Guaymas	54, 589 26	5, 386 85	59, 976 19
Campeachy	10, 135 00	47, 623 89	57, 758 80
Bahia de la Magdalena	....	40, 186 00	40, 186 00
Mier	19, 650 00	19, 767 80	39, 417 30
Altata	12, 809 92	26, 415 24	39, 225 16
Acapulco	6, 817 55	31, 132 30	37, 949 85
Coatzacoalcos	....	33, 842 00	33, 842 00
Camargo	8, 849 00	15, 839 17	24, 688 17
Piedras Negras	....	23, 089 50	23, 089 50
Zapaluta	22, 175 00	....	22, 175 00
Frontera	3, 052 00	18, 348 00	21, 400 00
Guerrero	150 00	19, 726 36	19, 876 36
Sasabe	9, 795 00	10, 049 20	19, 844 20
Tonala	2, 600 00	8, 627 80	11, 227 80
Soconusco	....	9, 900 00	9, 900 00
Ascension	....	9, 579 00	9, 579 00
Salina Cruz	400 00	8, 902 23	9, 302 23
Tijuana	....	6, 256 00	6, 256 00
Quitovaquita	....	1, 340 00	1, 340 00
Cabo de San Lucas	....	305 00	305 00
Total	9, 465, 998 59	2, 398, 123 65	11, 864, 122 24

Countries to which the exportations were made.

Country.	Precious metals.	Merchandise.	Total exportation.
England	$5, 149, 761 37	$427, 471 29	$5, 577, 232 66
United States	2, 574, 860 62	1, 629, 336 33	4, 204, 196 95
France	1, 367, 327 78	85, 826 68	1, 453, 154 46
Spain	207, 549 37	76, 080 50	283, 629 87
Germany	114, 586 50	159, 524 85	274, 111 35
Colombia	26, 537 95	19, 584 00	46, 121 95
Guatemala	22, 375 00	....	22, 375 00
San Salvador	3, 000 00	....	3, 000 00
Italy	....	300 00	300 00
Total	9, 465, 998 59	2, 398, 123 65	11, 864, 122 24

Exportations during the first and second quarters of the fiscal year 1882-'83.

	Precious metals.	Merchandise.	Total exportation.
Exportations during the first quarter	$6, 004, 827 14	$2, 346, 129 23	$8, 350, 956 37
Exportations during the second quarter	9, 465, 998 59	2, 398, 123 65	11, 864, 122 24
Total	15, 470, 825 73	4, 744, 252 88	20, 215, 078 61

Section 7. Mexico, May 31, 1883.

J. M. GARMENDIA.

THE PRECIOUS METALS IN FRANCE.

REPORT BY MINISTER MORTON, OF PARIS, ON THE COINAGE, PRODUCTION, CONSUMPTION, AND IMPORTS AND EXPORTS OF THE PRECIOUS METALS IN FRANCE DURING THE YEAR 1882.

Referring to your dispatch of February 2, 1883, marked "Separate," asking, at the request of the Secretary of the Treasury, to be furnished with all information obtainable touching the coinage, production, consumption, imports, and exports of the precious metals, also the amount of paper and metallic circulation in France during the calendar year 1882, and submitting for this purpose certain interrogatories, I have the honor to send herewith a statement giving the information desired, which has been kindly furnished by Mr. Tirard, the minister of finances.

LEVI P. MORTON,
E. E. and M. P.

LEGATION OF THE UNITED STATES,
Paris, May 24, 1883.

Statement made in reply to certain interrogatories of the Secretary of the Treasury touching the coinage, paper, and metallic circulation in France during the year 1882.

1. What was the amount of gold coined, in denominations and value?

Answer. 3,742,000 francs in coins of 100 francs.

2. The same for silver?

Answer. 1,159,859.50 francs in coins of 50 centimes.

3. What was the import and export of gold coin and gold bullion?

Answer. Regarding the imports, 254,537,942 francs in coin, 830,876 hectograms; 30,724,474 francs in bullion, 107,224 hectograms. Regarding the exports, 176,195,702 francs in coins, 591,058 hectograms; 15,870,148 francs in bullion, 64,146 hectograms.

4. The same for silver?

Answer. For the imports, 92,133,887 francs in coin, 6,657,411 hectograms; 33,860,531 francs in bullion, 2,084,520 hectograms. For the exports, 131,419,705 francs in coin, 8,554,742 hectograms; 25,874,227 francs in bullion, 1,664,187 hectograms.

5 and 6. What amount of gold and silver was produced by the mines?

Answer. The amount of the production of the mines during the year 1882 will not be known before some months.

7. What was the estimated amount of gold coin in the treasury, in the banks and in circulation, respectively, at the close of the year 1882?

8. The same for silver?

Answer. The metallic circulation belonging to the treasury is deposited in the Bank of France, and is not distinguished from the cash of the bank itself.

The balance sheet of December 28, 1882, of the bank shows that on that day the cash on hand was:

	Francs.
Gold	964,481,335.16
Silver	1,091,275,662.97
Total	2,055,756,998.13

As for the amount of metallic currency held by other banks, the finance department has no information.

9. What amount of paper currency, Government and others, respectively, was outstanding at the close of the year 1882?

Answer. In France the Bank of France alone can issue paper currency. On December 28, 1882, the amount outstanding was 2,790,357,475 francs.

10. Were any laws passed during the year 1882 affecting the coinage issue or legal-tender character of the metallic and paper circulation?

Answer. There were none.

THE PRECIOUS METALS OF MEXICO.

REPORT FROM THE DEPARTMENT OF HACIENDA TO THE DEPARTMENT OF FOREIGN AFFAIRS, IN ANSWER TO A NOTE FROM MR. MORGAN, THE MINISTER OF THE UNITED STATES.

The Minister of Hacienda to the Minister of Foreign Affairs.

DEPARTMENT OF STATE AND OFFICE OF THE TREASURY AND PUBLIC CREDIT, MEXICO.

Referring to the note of your Department of the 28th March last, and to the note which was addressed to you under the same date by the United States minister, asking for all the information obtainable concerning the coinage, production, consumption, importation, and exportation of precious metals, paper, and metallic currency in circulation, and other information relative to the financial condition of Mexico in the year 1882, and on whose behalf you transmitted the interrogatories propounded by the said minister, we proceed to give the fullest information possible, and to which end we copy categorically the questions indicated, placing in your possession the corresponding answers thereto.

2. What was the amount of silver coined, in denomination and value?

GOLD.

Denomination.	Number of pieces.	Value.
Pieces of the value of $20	18,169	$363,880 00
Pieces of the value of $10	2,287	82,870 00
Pieces of the value of $5	400	2,000 00
Pieces of the value of $2.50	800	2,000 00
Pieces of the value of $1	2,340	2,340 00
Total	....	452,590 00
SILVER.		
Pieces of the value of $1	24,520,610	$24,520,610 00
Pieces of the value of 50 cents	204,082	102,041 00
Pieces of the value of 25 cents	1,601,084	400,271 00
Pieces of the value of 10 cents	993,026	99,302 60
Pieces of the value of 5 cents	480,708	24,035 40
Total	....	25,146,260 00

3. What was the import and export of gold coin and of gold bullion?

4. What was the import and export of silver coin and of silver bullion?

In the official data there appears to have been no import of gold or silver, either coined or in bullion.

In respect of the exportation, there appears in the fiscal year already named, which ended June 30, 1882, the following:

Coined Mexican gold	$558,398 16	
Coined foreign gold	199,387 95	
Bullion gold	483,633 04	
		$1,241,419 15
Mexican silver	11,607,888 13	
Foreign silver	121,642 29	
Bullion silver	3,540,993 99	
Worked silver	1,279 35	
Silver ore	536,715 62	
Small ore	10,028 62	
Sulphuric ore	3,800 18	
		15,822,348 18
Total export of *precious metals*		17,063,767 33

5. What amount of gold was produced by the mines?
6. What amount of silver was produced by the mines?

It is regretted that there are no returns given by the different mining companies, but from the official data of the mints and custom-houses we form the following calculation:

Gold coined by the mints	$452.590 00	
Gold bullion exported	483,633 04	
		$936,223 04
Silver coined by the mints	25,146,260 00	
Silver bullion exported	3,540,993 99	
Silver ore exported	536,715 80	
Small ore exported	10,028 62	
Sulphuric ore exported	3.800 00	
		29,237,798 41
Total		30,174,021 45

It should be remembered that the mineral production is greater, considering the amount of silver and gold bullion which is reserved by private individuals in their safes, and also the amount which is employed in the arts.

7. What was the estimated amount of gold coin in the treasury, in banks, and in circulation, respectively, at the close of the year 1882?

8. What was the estimated amount of silver coin in said departments at the end of the year?

On the 30th of June, 1882, which is the date referred to above, there was no balance of coined gold in the treasury, and of silver there was $97,877.48. As regards the banks, we can only give information concerning the Mexican National Bank, which amount was $4,306,495.46.

In regard to the amount in circulation we have no reliable information.

9. What amount of paper currency, Government and other, respectively, was outstanding at the close of the year 1882?

There was no paper currency of the Government outstanding. The Mexican National Bank had in circulation bills to the amount of $2,062,520.

In respect of bills outstanding of other banks, viz: The Mercantil, the Bank of South America, and the Montepio, we have no information concerning them.

10. Were any laws passed during the year 1882 affecting the coinage, issue, or legal-tender character of the metallic and paper circulation?

The law which was passed on the 16th of December, 1881, required the cessation of the coinage of silver pieces of five cents and of one-cent copper pieces, and prohibiting the circulation of copper money after a lapse of two years, authorizing the coinage of a fractional currency with an alloy of 75 to 80 per cent. of copper and 20 to 25 per cent. of nickel, without, however, exceeding the amount of four millions of dollars.

With the above I have the honor to answer your note cited, of the 28th March last.

Liberty and Constitution. Mexico, April 30, 1883.

JESUS FUENTES Y MUÑIZ.

MINERAL AND METAL INDUSTRIES OF FRANCE.

REPORT OF CONSUL PEIXOTTO, OF LYONS.

A number of the departments embraced under my consular jurisdiction, such as the Rhone, Allier, Ain, Ardèche, Drôme, Isère, Côte d'Or, Nièvre, Puy-de-Dome, Haute-Saône, Saône et Loire, &c., are mineral-producing and iron and steel manufacturing districts.

My attention has naturally been directed to this subject, and I have in former reports given such statistics as to production as I have been able to derive from personal and official sources such as I have believed would be of general interest at home.

I beg now to submit a brief report on the same subject with reference to the whole of France.

COAL.

The yield of anthracite and pit coal for 1882 was 20,251,531 tons, being an increase over 1881 of 1,039,568 tons. If to this product be added that of lignites (of which there was a slight diminution) the total product of combustible minerals was 20,803,332 tons, or an increase over 1881 of 1,037,349 tons.

In totalizing the results of the year and grouping together the production of the departments belonging to the same coal basins, I find that the annual yield has increased in nearly all the groups.

The largest yielding districts have been as follows:

	Tons.
Pas de Calais	9,594,942
Loire	3,619,012
Gard	1,951,857

IRON AND STEEL MANUFACTURES.

There was a larger production in iron and a decreased manufacture of steel in France in 1882. The price of steel rails has fallen so greatly that there is now very little difference in the cost between those and iron rails.

Naturally the demand has been more important for the former, as their resisting power and durability are incontestably superior.

In comparing the figures of production I find that the decrease in steel has been for articles of merchandise, while there has been an augmentation in the manufacture of steel rails.

The decrease in merchandise steel has, however, been insignificant, only 193 tons, while the increase in the manufacture of steel rails has been 28,899 tons and for sheet-iron 2,931 tons.

The increase in iron manufactures has amounted to 52,994 tons, while for iron rails there was a decrease of 1,452 tons and for sheet-iron of 3,778 tons, which must be therefore deducted in making a comparative review between the two years.

In totalizing the results of 1882 and comparing the production with that of 1881, the following facts are shown:

	Tons.
Cast-iron manufactures	2,033,104
Iron manufactures	1,074,054
Steel manufactures	454,053
Increased production over 1881:	
Cast iron	146,754
Iron	47,764
Steel	31,637

The numerous public works in course of construction aid very materially the continued development of French metallurgic interests, the native industries benefiting by the preference extended to them by the Government over foreign European and American competition.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, March 13, 1883.

IRON AND STEEL TRADE OF NEW ZEALAND.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

Very few persons outside of New Zealand are aware of the vast extent of the iron and steel trade of this colony. Indeed, the demand for all kinds of iron and steel is so great that the value of their imports, exclusive of machinery, steam engines, and ironmongery (hardware) during the year 1881, reached the sum of $2,204,400, against $1,604,820 for 1880; showing an increase of $593,875 for 1881.

The value of the imports of machinery, steam engines, and ironmongery during the same period also showed a corresponding increase, and reached the sum of $1,856,250, thus swelling the total value of iron imports to the handsome sum of $4,060,650.

The following tables give the quantity and value of the imports of the various kinds of iron and steel into the colony of New Zealand for each of the years 1880 and 1881 inclusive.

Table showing the quantity and value of the various kinds of iron and steel, exclusive of machinery and hardware, imported into the colony of New Zealand during the year 1880.

Articles.	Quantity.		Value.
	Tons.	*Cwt.*	
Angle iron	13	00	$750
Bar, bolt, and rod	5, 394	00	269, 140
Bolts and nuts	195	00	21, 180
Castings	67	00	4, 995
Galvanized (corrugated)	3, 979	00	446, 400
Galvanized (plain sheet)	310	00	36, 985
Gates and posts	....		200
Hoop iron	456	00	22, 135
Pig iron	2, 652	00	38, 480
Pipes:			
Cast	6, 055	00	243, 655
Wrought	123	00	10, 255
Plate	154	00	10, 090
Rails (steel)	2, 364	00	76, 465
Railway bolts, &c	1, 208	00	62, 960
Sheet-iron	284	00	19, 500
Tanks .... number	3, 121		60, 095
Wire:			
Fencing	3, 027	00	197, 670
Telegraphing	76	00	9, 175
For reapers and binders	201	00	40, 169
Steel	128	00	14, 550
All other	....		19, 980
Total	....		1, 604, 820

Table showing the quantity and value of the various kinds of iron and steel, exclusive of machinery and hardware, imported into the colony of New Zealand for the year 1881.

Kind.	Quantity.		Value.
	Tons.	*Cwt.*	
Angle iron	35	10	$1,750 00
Bar, bolt, and rod	7,181	2	287,275 00
Bolts and nuts	262	7	25,025 00
Castings	28	00	2,650 00
Galvanized (corrugated)	6,461	4	642,275 00
Galvanized (plain sheet)	805	7	82,955 00
Gates and posts	1	04	235 00
Hoop iron	629	8	28,745 00
Pig iron	2,832	00	52,870 00
Pipes:			
Cast	6,148	00	234,515 00
Wrought	298	19	18,710 00
Plate	507	17	24,875 00
Rails (steel)	6,619	00	209,785 00
Railway bolts, &c	228	10	13,270 00
Sheet iron	434	00	24,795 00
Tanks .... number	2,133		38,000 00
Wire:			
Fencing	6,125	17	408,485 00
Telegraphing	42	12	5,725 00
For reapers and binders	377	9	78,505 00
Steel	305	6	23,955 00
	....		2,204,400 00

The returns for 1882 have not yet been printed, but I am informed by the secretary and inspector of customs at Wellington that the quantity of bar iron imported during that year was 8,122 tons, hoop iron 757 tons, sheet iron 543 tons, plate iron 705 tons, fencing wire 9,212, making a total of 19,342 tons.

PRICES OF IRON.

The cost of iron here varies according to the supply and demand. The price of bar and rod is from $45 to $65 per ton, according to quality. Castings are $70 per ton; staples from $100 to $140, standards from $60 to $70; galvanized iron from $115 to $135; plate iron from $60 to $65; steel rails from $40 to $50 per ton. Nearly all the iron used here, with the exception of a small quantity of American castings, bolt and rod iron nuts, and hoop iron, comes from England, where, on account of the low price of labor, the proximity of the mountain limestone used as a flux and the interstratification of coal and iron, it can be produced cheaper than in the United States. Moreover, it is said that the coal deposit of Great Britain is about one-tenth of the whole area of the kingdom, while that of the United States is only one-seventeenth of her territory. Of course the percentage is larger in some of the States, for instance, Pennsylvania, where there is nearly 16,000 square miles of anthracite, but instead of being interstratified with iron as in England, it usually lies at a considerable distance therefrom. England, however, may be said to have reached the acme of her iron productions, while in the United States the industry is comparatively a new one; but it is an industry that is reaching vaster proportions every year. The castings brought here from the United States are admitted by every one to be much neater and in every way better adapted to the trade than those brought from England.

IRON AND STEEL RAILS.

By reference to the preceding tables of the quantity and value of the various kinds of iron and steel imported into New Zealand, it will be seen that there is a large increase in the imports of the quantity and value of steel rails. The reason of this is that iron rails are going out of use in the construction of railways here as well as in the United States. In fact, all the iron rails in New Zealand are gradually being replaced by Bessemer steel ones. The price of the latter is very low here. There also appears to be a steady decline in the cost of steel rails in the United States. The last quotations there were as low as $40 per ton, although some manufacturers contended that the price was only a temporary one; that these rails were put down by one of the manufacturing companies at a fictitious price in order to secure a readjustment of the cost and values on a solid basis.

The demand for Bessemer steel rails, it is reasonable to believe, will steadily increase for some years to come, not only in New Zealand but in all the Australasian colonies. There are now 1,258 miles of railway open in New Zealand and 200 more in course of construction. In Victoria there are 1,199 miles of railway open, while New South Wales has 849 miles and is constructing 456 more. The total number of miles of railway open in all the Australasian colonies is 4,851, and in construction 1,189. Moreover, new railways are being projected in every one of the colonies.

DUTIES ON IRON.

The duties charged on iron imported into New Zealand are moderate, and many articles, such as bar, rod, bolt iron, screws, castings, iron bridges, iron and steel rails, and all material for the construction of bridges, wharves, jetties, or patent slips, are admitted free, as are all kinds of machinery, steam-engines, boilers, &c. Wire fencing, however, is taxed at 1 shilling (24 cents) per 1 cwt., and so are standards, straining posts, and apparatus. Gates and gate posts are taxed at 4 shillings (96 cents) per cwt. Corrugated sheets, guttering ridges, spouting, &c., are 2 shillings (48 cents) per cwt.; nails are 2 shillings (48 cents) per cwt.; tanks are 5 shillings ($1.20) each, if of 200 gallons and over the duty is 2 shillings and 6 pence (60 cents) each. The duty on ironmongery or hardware is 15 per cent. ad valorem. Iron safes are also taxed 15 per cent. ad valorem.

COST OF FREIGHT.

The cost of freight on iron from New York by sailing vessels is about $7.50 per ton measurement, and from San Francisco via Pacific Mail Steamship Company it is $15.

Ironmongery or hardware, including iron safes, is $18 per ton; the ton being either 40 cubic feet or 2,240 pounds.

IRON AND BRASS FOUNDRIES.

There are thirty-five iron and brass foundries in New Zealand, all of which are doing a prosperous business. Of these ten are located in Auckland, six in Wellington, one in Nelson, one in Westland, five in Canterbury, one at Hawkes Bay, one at Marlborough, and ten in Otago. Over one thousand hands are constantly employed in these foundries. The total value of the ground and buildings connected therewith is $417,905. The total value of the machinery and plant is $358,430.

The average wages of the engine and boiler makers employed in these foundries is from $2.50 to $3.00 per day.

*These foun*dries, and especially those in the large cities, are capable of repairing and manufacturing all kinds of boilers and engines, and of putting together iron ships of any size.

IRON ORE.

The mineral resources of New Zealand are so vast and varied that they cannot be easily overestimated.

The supply of coal is boundless, and vast deposits of iron ores are scattered throughout both the north and south islands. The following are some of the most important forms of iron found in the colony: Hemitic, from veins in the schistose and crystalline rocks; magnetic iron oxide, from the schistose rocks and from various igneous rocks of recent origin. Argillaceous iron ores from the various coal-bearing formations are found in great abundance. Hematite occurs in large quantities in the serpentine rocks near Nelson. At Parapara, Nelson, according to the colonial geologist, vast quantities of brown hematite ore occur on the surface of the ground. Some of this was recently converted into iron at Melbourne and gave the following analysis:

Iron	97.668
Manganese	268
Carbon, combined	542
Carbon, free (graphite)	208
Silicon with titanium traces	1.004
Phosphorus	140
Sulphur	269
	100.000

Its color is uniform, approaching white; structure homogeneous and finely granular, hard, and brittle. On the west side of Mount Peel a deposit has been traced for a distance of three miles, and beyond that point it is said by diggers to swell out more than a mile in width.

Specular iron ore is found at Dun Mountain, Nelson, and at Maori Point, Shotover, Otago, both veins being very rich. At Dun Mountain there is also a vein 16 feet of magnetic iron ore in serpentine slates. At Lake Wakatipu there is a rich vein of the same ore and another at Maramaru, Frith of Thames; that at Maramaru contains oxides of titanium and manganese.

Spathic iron ore occurs in large quantities in the district of Collingswood, more or less oxidized. One form of this ore, known as the black band, alternates with the coal seams of that district. Iron band ore, containing 70 per cent. of iron, is found at Wyrdam River, Otago, and at the Manukau harbor, Auckland, formed by the blak layers becoming cemented with hematite.

The following is an analysis of hematite ore from Raglan, in the province of Auckland:

Sesquioxide of iron	72.69
Oxide of manganese	.31
Alumina	2.02
Magnesia	.69
Lime	.58
Sulphide of iron	.11
Hygroscopic water	4.61
Constitutional water	13.02
Silicates undercomposed by acids	5.97
	100.00

I am indebted to Dr. James Hector, the colonial geologist, for the following valuable tables, showing in detail the various kinds of iron ores of New Zealand, together with their centesmial composition, the districts where found, &c.:

Massive iron ores, oxides, and titanites.

Variety.	Locality.	Centesmal composition.					Percentage of iron.	Remarks.
		Magnetite.	Hematite.	Titanic iron.	Siliceous matters.	Water.		
Impure magnetite	Manukau, Auckland	60.20	37.90	Traces	1.90	......	70.06	
Magnetite	Dunstan Gorge, Otago	86.32	......	Traces	13.68	......	3.60	
Hematite	Dunstan, Otago	......	96.11	....	3.89	......	8.30	
Magnetite	Dun Mountain, Nelson	......	90.62	....	7.60	1.80	63.40	
Mixed magnetite and hematite.	Maramarua, Auckland	2.24	87.10	Traces.	10.66	......	62.30	
Bog iron ore	Spring Swamps, Auckland	......	73.17	....	13.83	13.00	51.22	
Brown iron ore	Raglan	......	72.69	....	9.68	17.60	50.88	Oxide, 1.38,
Do	Kawau	......	67.98	....	19.65	12.37	47.58	Manganese.
Hydrous hematite*	Parpara, Nelson	......	62.68	....	24.08	13.24	43.87	A little manganese.
Do	Mount Peel, Nelson	......	......	....	......	......	6.00	

*Contains a little manganese.

Black bands or spathic iron ores.

Variety.	Locality.	Protoxide of iron.	Sesquioxide of iron.	Carbonic acid.	Silicates.	Percentage of iron.
Blackband	Collingwood, Nelson	35.23	25.77	21.12	3.93	46.06
Do	do	40.38	5.26	21.97	16.69	35.16
Spathic	do	....	....	....	....	40.06
Do	do	....	....	....	....	41.00

There are large deposits of iron ores on the Bridgewater estate in the Waikato district, amongst which are the following: Hematite, with clay bands attached; blue flats, iron ore; Gubbins stone ore and diamond stone ore. The hematite is of a very hard nature and is from 8 to 10 inches in bands, and estimated to be 3 feet 6 inches to 4 feet in the aggregate. The blue flats ore is very rich and of a softer nature than the hematite, and is very abundant.

William J. Dalton, a prominent civil engineer of Auckland, in a valuable paper on the Bridgewater estate, says that there is about 100 acres of the property where the blast has apparently burst out and formed large ridges with masses of nearly pure iron. From the quantity of the ore and the facilities for working it, he predicts that the people of Auckland will not long be dependent on foreign markets for this metal.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, February 20, 1883.

NEW ZEALAND IRON-SAND AND AMERICAN SEPARATORS.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

NEW ZEALAND IRON-SAND.

Although no systematic effort has ever been made to develop the iron mines of the colony, vast sums of money have been expended in energetic and persistent efforts to utilize the extensive deposits of iron sand scattered throughout the west coast of the north island and the east coast of the south island.

This sand is also found in vast quantities along the coast of Stewart's Island and in nearly all the creeks and rivers of the colony.

At New Plymouth, in the province of Taranaki, the supply is absolutely unlimited and can be counted by millions of tons. It fringes the entire western coast of the north island for a distance of several hundred miles, indeed all the way from Mount Egmont to Ahipara, north of Hokianga.

It is formed doubtless by the action of the waves of the sea on the volcanic rocks, which are largely charged with iron. The rocks are gradually worn away by the continued trituration of the water, and the heavy iron sand is separated from the lighter material and heaped up along the coast. The sand in the rivers and creeks has been washed there from the cliffs by the rain. In many parts of the islands after heavy showers, it is no uncommon thing to find this sand glistening along the roads.

A few years ago a small quantity of this magnetic sand was sent to England, where it was manufactured into steel cutlery. It consists of peroxide and protoxide of iron mixed, and yields from 50 to 70 per cent. of the finest quality of the metal.

The existence of this sand was known to traders and masters of sailing vessels long before the establishment of a responsible government in New Zealand. On approaching the shore the masters of vessels that first visited these islands noticed a great deflection of the mariner's compass, for which they were wholly unable to give a satisfactory explanation.

At that time Maoris or aboriginal inhabitants were so fierce and warlike that it was not safe for Europeans to leave their ships for the purpose of examining the shore.

Some of the officers of the ships expressed the opinion that the deflection of the compass was caused by large deposits of loadstone along the beach. When the intercourse between the Europeans and natives became more frequent this idea was abandoned, and a satisfactory reason was found in the discovery of the fine particles of iron mixed with sand along the shore.

That the reader may form something like a fair idea of the magnitude of these iron sand deposits, I will mention that on some parts of the beach, for instance in the neighborhood of Waniku, in the province of Auckland, the area of this sand is so great that it appears to stretch out to illimitable space, often extending miles in width toward the interior of the island, submerging rocks and trees and shrubs, in fact everything within its reach, covering even the tops of the most distant hills.

The vast extent of space which it occupies, its peculiar floating appearance, forming itself here and there in wavy or undulating ridges, and its unmistakable bluish color, make it look as if it were indeed a part of the great ocean itself.

The sand from the Upper Buller River, in the province of Nelson, is found to contain the largest percentage of iron. The next largest is that found on the Taranaki beach, then follows the sand in Mountain Stream, province of Canterbury, and that of the Upper Molyneaux River in Otago. All of it is more or less impervious. That at the Lower Molyneaux River is auriferous, with 12 per cent. of glauconite. The sand at West Bluff, Foveaux Straits, is charged with gold and platinum. The following table shows the component parts of the iron sand of this colony:

Locality.	Matrix from whence probably derived.	Magnetite.	Hematite.	Titanite.	Per cent. of iron.	
Upper Buller River, Nelson.	Hornblende rocks	87.5	9.4	......	70.2	
Lower Buller River, Nelson.	Tertiary gold drift of diorite slate.	54.0	......	42.3	59.0	Auriferous.
Upper Molyneaux River, Otago.	Mica-schist	82.7	......	9.7	65.9	Do.
Lower Molyneaux River, Otago.	Mica schist and tertiary strata.	74.4	......	2.5	58.7	Auriferous and with 12 per cent. of glauconite.
Mountain Stream, Canterbury.	Palæozoic slates strata.	62.7	37.2	......	66.2	
Mountain Stream, Otago	do	86.1	10.5	......	58.5	Auriferous.
Tuapeka, Otago	Old gold drift	2.2	92.8	......	63.8	Do.
Wakatipu, Otago	Mica-schist	80.0	7.6	......	52.9	Do.
Mataura River (Upper)	Diorite slate	9.8	......	70.9	41.2	
Do	Old gold drift	63.5	16.1	8.0	60.6	
Stewart Island	Granite rocks with greenstone dikes.	77.8	......	20.1	57.3	Auriferous.
Do	Hornblende rocks	71.5	20.0	8.2	70.1	Do.
Anatoke, Nelson	Granite and hornblende.	79.8	7.7	3.4	60.2	Do.
Mahinepoa Lake (old channel of Hokitika.)	River drift from diorite rocks.	......	......	58.0	29.1	Auriferous, with garnets, topaz, disthene, &c.
Sea Beach, Hokitika	Sea sand drift	75.0	......	......	54.0	Auriferous.
Motueka River, Nelson	Tertiary strata and granite.	33.0	32.5		42.0	Do.
Wairau River, Marlborough.	Tertiary strata and granite schist.	21.0	48.4		38.9	Do.
Wanganui River, Nelson.	Granite and Tertiary	54.0	13.0		43.2	Do.
Saddle Hill, Otago	Basaltic	58.3	......	25.6	52.9	
Green Island, Otago	Basaltic or sea beach	53.3	......	29.6	50.3	
Hooper Inlet	do	20.0	74.2		53.0	
West Bluff, Southland, Foveaux Straits.	Diorite or sea beach	12.2	......	40.6	28.6	Auriferous and platineous.
D'Urville Island, Nelson.	Diabase and granite	78.6	......	..	57.4	Chrome iron.
Taranaki Beach	Trachite	91.9	......	6.2	70.1	
Do	do	71.0	......	8.0	56.1	Olivine and hornblende.
Tauranga Beach	do	87.4	8.6	....	68.0	

AMERICAN ELECTRIC ORE SEPARATORS.

The cause of the repeated failures in the attempts to make iron and steel out of the magnetic sand in New Zealand is doubtless owing to the old-fashioned mode of working it. Various experiments have been made with the blast furnace by mixing the iron sand with calcareous clay, and making it into bricks, but the molten iron could not be made to run. After these failures those interested in the work looked to America for advice and assistance. Upon inquiry through this consulate it was found that the United States Government had granted as many as 38 different patents for electric ore separators, including two patents granted to T. A. Edison, the celebrated inventor. It was also learned that iron and steel were manufactured on a large scale by D.

C. McArthur from the iron sand obtained at Block Island, Rhode Island, and that McArthur was able to clean a hundred and twenty tons of sand per day, the separation being done by means of a magnet.

The ore is placed in bags and shipped to Rahway, N. J., where it is mixed with finely-ground charcoal and put into the furnace. Ten tons are heated at a time to a red heat, and kept at a red heat until let down into the puddling furnace and worked into blooms, and hammered into square and oblong blocks.

A furnace on the American plan has been successfully established at Onehunga, a few miles from Auckland. It was first opened to the general public on the 8th instant. The furnace used is the invention of Joel Wilson, of New Jersey. It was first patented in the United States, but patents have been secured for it in all the Australasian colonies.

The managers claim that they can manufacture iron in Auckland much cheaper than it can be brought from England. Indeed, Mr. Jones, of Philadelphia, who is working the furnace at Onehunga, is of the opinion that he can obtain the same results from the iron sand as from pig iron, thus avoiding the extra expense of making the latter. He has recently made a series of experiments of the various kinds of New Zealand coal for the purpose of finding a substitute for charcoal for mixing with the iron sand before putting it into the furnace. These experiments it is said have resulted in the discovery that the Taupiri slacked coal of the Waikato district answers the purpose better than any other, and in some respects it is even better than charcoal, as it is very much cheaper and does not require to be ground, and burns at a steady red heat and leaves a pure, clean white ash.

The managers expect to have as many as ten furnaces in operation at Onehunga in the course of a few months.

The Government of New Zealand has taken great interest in the development of the iron mines, and offers a bonus of £1,000 to any one who will make in this colony the first 200 tons of iron blooms out of New Zealand ore.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, New Zealand, February 20, 1883.

FIDELITY GUARANTEE POLICIES IN AUSTRALIA.

REPORT BY CONSUL-GENERAL SPENCER, OF MELBOURNE.

The issue of fidelity guarantee policies, by insurance companies, supplies a desideratum that has long been deeply felt, not only in official but in commercial life, whilst it furnishes one of the most striking illustrations of the co-operative tendencies of the complex civilization of the present age.

The advantages of the system are so obvious, and the objections to private guarantee are so many and so great, that it is surprising that the latter has not long since been superseded by that of public companies. To a man of refined and delicate sensibilities, occupying a position of trust and responsibility, nothing could be more embarrassing than to be under the necessity of soliciting his personal friends to become pecuniarily responsible for his fidelity and good behavior.

Not to speak of the gain in self-respect and personal independence on the part of the guarantee, the system relieves the guarantor from the embarassing alternative of either being compelled to refuse a personal favor, or of incurring without any valuable consideration a greater or less degree of pecuniary liability.

"A clerk in a bank, a new official in the Government service, or a municipal officer," says the Australasian Insurance and Banking Record, "need not go hat in hand to any one. With good character at his back he can buy the commodity he wants. Guarantee is an article purchasable in the market from companies which make it their business to sell it, and which do so, not as a benevolence, but as a profitable source of revenue."

There appears to be no good reason why one should ask a friend to insure his honesty any more than his life or his dwelling house. In either case it is, or should be, a purely business transaction in which the applicant should be expected to furnish a *quid pro quo*. This becomes the more obvious in view of the fact that during a given period and under certain prescribed conditions, the number of cases of dishonesty or breaches of trust may be calculated and tabulated with the same approximate accuracy as the number of deaths, or fires, or shipwrecks. Besides, there is this great moral advantage, that, as the character of the applicant for honesty and fidelity is subjected to a searching ordeal, and the examination is conducted on business principles, unbiased by personal or political considerations, the system has a tendency to elevate the moral status of the great body of officials occupying positions of trust and responsibility.

The system of fidelity guarantee by companies appears to have met with great success in Victoria, where it has been established for nearly a quarter of a century. It is stated on good authority that there is one company in Melbourne doing business in the several departments of fire, marine, life, and fidelity guarantee, in which the profits in the last-named branch during a period of twenty years were equal to 10 per cent. per annum on the entire capital employed in all the branches. In fact, no company has failed to pay handsome dividends that has been able to secure a fair proportion of the risks arising out of the Government service.

The following are the current rates of premium for fidelity guarantees:

Government clerks, 2*s*. 6*d*. per cent. per annum.
Bank clerks, 10*s*. per cent. per annum.
Municipal officers, 15*s*. per cent. per annum.
Collectors, 30*s*. per cent. per annum.

It will be observed that the rates of premium are fixed on the different classes of occupation, and not on individual risks, and that they take a wide range, varying according to the several kinds of employment. To account for this difference, based, no doubt, upon the results of a large experience, would prove, perhaps, a difficult task. It may be suggested, however, that the probable reason of the low rate of premium in the case of Government clerks is principally to be found in the fact that the Government invariably prosecutes. On the other hand, all claims arising from breaches of trust in the public service are practically paid by the company without demur or recourse to litigation.

In the case of Government officials the Australian Alliance Assurance Company offers additional advantages, at materially reduced rates, by a combination of fidelity guarantee with life assurance. When, for example, a Government guarantee is accepted at 2*s.* 6*d.* per cent. and a life assurance for twice the amount of the guarantee is combined, the whole of the guarantee premium is practically foregone, nearly the whole amount being applied to the reduction of the premium otherwise payable on the life assurance policy.

The same company has entered into an arrangement with the Victorian Government by virtue of which a general policy, embracing one or more departments of public service, may be taken out by simply making a declaration similar to that under a general policy of marine insurance.

The following or similar questions are usually addressed to Government officials on application for a policy of fidelity guarantee:

1. What is your name in full?
2. Where do you reside? What is your age? Where were you born?
3. Are you married or single, and what family have you dependent on you for support?
4. Have you any relatives in this colony? If so, name two or three, and their places of abode.
5. What is your present occupation?
6. What situations have you held during the last ten years, and who was your last employer?
7. Have you been in Her Majesty's service before? And if so, how long?
8. Have you ever been deprived of your appointment? If so, why?
9. Have you any source of income beyond the appointment with which this application is connected?
10. Who are your referees? Name two or three, with full address.

Should the answers to these questions be regarded as satisfactory, the head of the department in which the applicant is about to be employed is requested to furnish replies to the following interrogatories, which, when answered, constitute the basis of the contract between Her Majesty and the insurance company:

1. In what department is applicant to be employed?
2. What is the name of the office which he is to hold?
3. What amount of money will be intrusted to him during the day?
4. What salary is he to receive, and how is he to be paid?
5. How often, and to whom, will applicant have to render an account of his monetary proceedings? What checks will there be on his accounts?
6. Have you ever heard anything about his character or proceedings which would render him an unsafe person for the company to guarantee?
7. Is this guarantee the only one you will require for the applicant? If it is not, state what further amount, and in what office.

Transmitted herewith, and marked respectively A, B, C, D, and E, will be found blank forms of guarantee proposals, referee's circular, agent's report, and guarantee policies, both ordinary and official.

O. M. SPENCER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Melbourne, March 12, 1883.

E.

AUSTRALIAN ALLIANCE ASSURANCE COMPANY.

[Vignette.]

Amount guaranteed, £——. Annual premium, £——.

CAPITAL, £250,000 STERLING.

Whereas —— ——, of ——, hereinafter styled the employé, is employed in that department or branch of the Government service of the colony of Victoria known as the ——, in the capacity of ——, at ——, upon condition of the employé procuring a sufficient surety to guarantee Her Majesty, her heirs, and successors, hereinafter called the assured, to the amount of —— pounds against loss occasioned by the want of integrity, honesty, or fidelity of the employé in such employment, or in whatever situation or office he may be employed in the service of the assured;

And whereas, in performance of the said condition, the employé, with the concurrence of the assured, hath agreed with the "the Australian Alliance Assurance Company" for the grant by them to the assured of this policy of guarantee. And as the basis of the contract for such guarantee, the assured hath deposited at the office of the said company a statement or document in writing, dated the —— day of ——, 18—, and containing (among other things) a declaration signed on behalf of the assured by —— ——, being authorized by the member of the executive council of the colony of Victoria in whose department of the service the employé is for the present employed [to act for him in this behalf] of the truth of the answers thereby given to the questions therein contained;

And whereas the employé hath paid to the said company the sum of —— pounds —— shillings and —— pence as the premium or consideration for such guarantee as hereinafter expressed up to the first day of January, 18—, and afterwards until notice of the termination of this guarantee shall have been given to the treasurer or minister of finance for the time being of the said colony:

Now this policy witnesseth that "the Australian Alliance Assurance Company," relying on the truth of the said declaration, do hereby agree and declare that during the space of time aforesaid, and until such notice as aforesaid has been given, and afterwards during every succeeding year in respect of which the said company shall consent to receive, and the assured or employé, or one of them, shall, before or upon the first day of January, in the same year, pay to the said company the annual premium or sum of —— pounds —— shillings and —— pence, the subscribed capital and the funds and other property of the said company remaining unapplied and undisposed of at the time when the proof hereinafter mentioned is furnished to the said company, shall be liable to reimburse and make good to the assured or her heirs and successors, within three calendar months next after proof shall be given to the reasonable satisfaction of the directors of the said company of the occurrence of such next mentioned loss, every loss whatsoever, but not exceeding in the whole the said sum of —— pounds, which, during the continuance of the liability of the said company under this policy, shall be sustained by the assured by reason of any fraud, deceit, or culpable negligence of the employé in h— employment by the assured, or which may happen by h— conniving at or sanctioning any unlawful act contrary to h— duty as such employé, or by reason of h— omission to perform and fulfill with fidelity and care all the duties of and pertaining to h— said employment, or by reason of h— omission to duly and legally pay, apply, dispose of, and deliver all moneys, chattels, and securities for money which shall at any time come to the possession or control of the employé or be intrusted to h— care by reason or virtue of h— office, service, or employment by or on behalf of the assured or any officer in the service of the assured, or by reason or in consequence of the want of integrity, honesty, or fidelity in any other respect of the employé in h— employment as aforesaid.

Provided, always, that this policy and the guarantee hereby given shall be subject to the terms and conditions hereupon indorsed in the same manner as if all the said terms and conditions were herein incorporated at length.

Provided, also, that this policy is granted upon the express condition that every person at any time making any claim hereunder shall, at the costs of the said company, whenever required so to do by the directors or the chairman of the directors or other duly authorized agents or agent thereof, afford every description of aid or assistance capable of being afforded by such person for the purpose of enabling the said company or the chairman of the directors to prosecute or bring to justice the employé for any criminal offense committed by h— while employed as aforesaid, or to procure the reimbursement of the said company by the employé or h— estate of moneys paid by the said company under this policy.

Provided, also, and it is hereby agreed and declared, that no member of the said company shall in any event be liable under or by virtue of this policy in his or her individual capacity beyond the amount remaining unpaid in respect of his or her shares in the capital of the said company at the time of such proof as aforesaid being furnished, and that no person having been and having ceased to be a member of the said company before the time of such proof being furnished as aforesaid shall be in any manner liable under or by virtue of this policy.

In witness whereof the undersigned directors of the said company on behalf the said company have hereunto set their hands and seals this —— day of ——, in the year of our Lord one thousand eight hundred and ——.

[SEAL.] —— ——,
[SEAL.] —— ——,
Directors.

Signed in the presence of—

—— ——,
Manager.

Examined, ——.
Entered, ——.
Government guarantee policy.

TERMS AND CONDITIONS REFERRED TO BY THE WITHIN POLICY OF GUARANTEE.

1. That any fraudulent misstatement or suppression in the declaration within referred to, and in consequence of and with express reference to which this policy of guarantee is granted by the company, renders such policy *void* from the beginning; but if the policy has been issued upon any other declaration than that of a member of the executive council or his duly appointed deputy, then it shall not be avoided by the falsity of such declaration.

2. That the annual premium payable upon this policy of guarantee must be paid within *thirty* days from the day on which it first accrues due, and that if paid within such *thirty* days the policy does not become void; but if not so paid, then, subject to a discretionary power for the directors to remit the forfeiture, the policy will be absolutely void; provided, nevertheless, that the liability of the company under this policy will continue until notice of the contrary has been duly given to the honorable the treasurer of Victoria.

3. That the right to make a claim under this policy of guarantee ceases *three* months after the death of the party whose honesty is guaranteed.

4. That (subject to a discretionary power exercisable in certain cases by the directors of remitting the forfeiture) this policy of guarantee becomes void *as to future claims* upon its becoming known to the said directors that the person whose honesty is guaranteed has committed any act which gives the right to make a claim under the policy; and that employers are bound, immediately upon discovering or having notice of the commission of any such act, to forward a written intimation of the same, and so far as circumstances will permit of all particulars attending the commission thereof, to the said directors, and that by willfully and knowingly omitting or neglecting so to do for *thirty* days after such discovery or notice the policy becomes absolutely void, *both as to existing and future claims.*

5. That in case this policy be or become subject to any trust, the receipt of the trustees for the time being for the money which may become payable thereon shall, notwithstanding any equitable claim or demand whatever of the person or persons beneficially entitled thereto, be an effectual discharge to the company.

6. No receipts for renewal premiums on policies of guarantee except those printed and issued from the principal office will be admitted as valid.

7. No alteration of duties or employment of the said employé shall invalidate this policy so long as he be continued in the employment of Her Majesty.

8. The company will pay the amount of loss for which this policy is guaranteed within three calendar months next after proof as within mentioned, such proof to include, if the directors shall so require, a statutory declaration by some Government officer to the effect that such loss has been sustained to the full amount claimed.

9. Any policy which shall have lapsed by reason of notice to the treasurer or minister of finance of non-payment of premium shall be revived by notice being given to the treasurer or minister of finance that payment of the premium has been accepted by the company.

10. This policy shall extend to cover any loss which shall be sustained by third persons through the aforesaid acts or defaults of the employé whom the governor in council may deem it necessary to reimburse.

SETTLEMENT OF THE NATIONAL DEBT OF MEXICO.

REPORT BY MINISTER MORGAN.

I transmit herewith a translation of the law lately passed by the Mexican Congress authorizing a settlement of the national debt.

P. H. MORGAN,
E. E. and M. P.

LEGATION OF THE UNITED STATES,
Mexico, June 19, 1883.

THE LAW.

[From the Diario Official. Translation.]

DEPARTMENT OF STATE FOR HACIENDA AND
PUBLIC CREDIT, MEXICO, SECTION 6,
MONDAY, *June* 18, 1883.

The President of Mexico has sent me the following decree:

Manuel Gonzalez, constitutional President of the United States of Mexico: To the inhabitants thereof.

Know ye:

That the Congress of the United States of Mexico has sent to me the following decree:

ARTICLE 1. The Executive is authorized to settle the national debt upon the following basis:

I. Establish the form, conditions, and place for the examination, recognition, liquidation, and conversion of the debt.

II. Consolidate the entire debt under new titles, which shall bear interest at the rate of 3 per cent. per annum.

III. No matter what may have been the origin of the debt or the nationality of the holders thereof, the whole debt shall preserve its Mexican character, to which no international character can be given, nor can the payment of the interest thereon be exacted out of any special fund.

IV. Fix the term of the amortization, and make with the creditors the best terms which he can obtain from them in the interest of the Republic.

V. He cannot recognize, and for this reason are not to enter into the conversion, the debts which emanated from Governments which pretended to exist in Mexico from the 17th of December, 1857, to the 24th of December, 1860, and from the 1st of June, 1863, to the 21st of June, 1867. Neither can the claims which have heretofore been rejected be recognized.

VI. New bonds shall be issued by the general treasury of the nation for the consolidated debt, and shall exchange them for the old ones, at their face value, and these last shall become null in virtue of the conversion.

VII. Are to be rehabilitated, and to enter into the conversion, those debts which have been deferred and those which have been prejudiced, if their origin was legitimate and the authenticity of their emission is established.

Those (holders of bonds?), who are prejudiced for having adhered to the Empire shall be rehabilitated, with a reduction of 4 per cent. upon the value of their debt, equivalent to the reparation imposed upon them by the law of the 19th of November, 1867.

VIII. All reclamations pending in the departments or before the courts, where they shall have been admitted (*depurados*) and acknowledged in conformity with the laws, shall enter in the conversion for the amounts recognized to be due to the claimants.

IX. The balance of estimates due since the 30th of June, 1882, which are not comprehended in Article 7 of the law of the 10th of October, 1870, will enter into the conversion after they shall have been liquidated in conformity with the laws, reserving to the Executive the right to establish an equitable basis upon which to terminate pending liquidations in cases which are not susceptible of a strictly legal determination, in consequence of irregularity in the archives, the death of the parties responsible for the presentation of the documents, the distribution of payments, and other circumstances of the same nature which prejudice, and without their fault, the rights of creditors.

X. The conversion of the debt shall be voluntary; consequently, those creditors who *do not agree to* the terms which the Executive shall fix for the registry, examination, or liquidation of their debts, preserve their actual rights to the capital; but the debt which they represent shall be deferred and shall not bear interest after the expiration of the term fixed for the registry thereof, after which, the conversion having been made, the mode of their payment shall be determined.

ART. 2. Besides the benefit to be derived from the proposed amortization of bonds of the consolidated debt, these (the bonds) and their interest coupons shall be received at the federal treasury in payment of the following:

I. In payment of *terrenos baldios* belonging to the federation.

II. In payment of debts or nationalized estates (church property), without prejudice to the rights of those who have denounced them in, specie.

III. Costs for patents of inventions.

ART. 3. Such coupons of the consolidated debt as may remain unpaid at the end of any fiscal year shall be paid in the following year, and shall be received, to the extent of 5 per cent. thereof, in payment of the federal imposts therein levied.

ART. 4. This law does not apply to the debts in course of payment in virtue of the convention with the United States of the North on the 4th July, 1868, nor to those due for subventions to railroads, which are to be paid in conformity with their respective contracts.

ART. 5. The Executive shall order, at the end of each fiscal year, after the accounts of the general treasury have been adjusted, that certificates of indebtedness issue to creditors for salaries, pensions, or services the term for whose payment has not been designated or fixed by law or by express contract.

ART. 6. In the annual estimates special consideration shall be given to the amortization of the certificates for balances due; and those which are not amortized within five years from the date of their emission shall from the sixth year bear interest at the rate of 3 per cent. per annum, and shall be upon the same footing with the consolidated bonds issued under the present law, for which they shall be exchanged.

I. M. VIGEL,
President of the Chamber of Deputies.
P. LANDAZAN,
President of the Senate.
EMETERIO DE LA GARZA,
Secretary of the Chamber of Deputies.
D. BALANDRANO,
Secretary of the Senate.

Wherefore I order it to be printed, published, circulated, and obeyed accordingly

Thus done in the palace of the executive power of the Union in Mexico, the 14th June, 1883.

MANUEL GONZALEZ.

To the secretary of state for hacienda and public credit, JESUS FUENTEZ Y MUNIZ.

And I communicate it to you that it may have its effect.

JESUS FUENTEZ Y MUNIZ.
Al ——— ———.

BANKS AND BANKING IN COLOMBIA.

REPORT BY CONSUL DAWSON, OF BARRANQUILLA.

I have the honor to furnish the following statement in regard to the banks of this country. This statement, prepared for this office over a year ago, was, for some unexplained reason, detained in the post-office at Bogota nearly one year.

It would appear that bank stock is a pretty good investment in Bogota, until an examination of the small resources the bank has to meet a sudden run. The item "cash" doubtless consists of bank notes of other banks to a large extent, and a sudden and simultaneous run would of course prove disastrous to most of them.

The Bank of Bogota in ten years has paid a little over 100 per cent. in dividends. The Bank of Colombia, in five years, has paid 83 per cent. The Bank Popular, in three years, has paid over 55 per cent. The national Government has no supervision over any of the banks except the National Bank, which is nothing more than an institution established for the purpose of discounting the Government's own obligations. As an example, the Government fails to pay the pensions for five or six months; those who should receive them are suffering from want, and the National Bank steps in and offers to discount them. In this way the Government makes a large profit. Nearly if not all the stock of the National Bank is owned by the Government. All the other banks derive their powers from the State governments, and are never taxed, except in case of a revolution, when they are all liable to be visited by the various chiefs. The only security for the circulation of the banks is the individual liability of the stockholders. A new system of banking has recently been introduced here. To illustrate it, let us suppose that you own a house and want to raise some money on it. You ask two or three of your friends to appraise it for you, which they do, and furnish you with a certificate that it is worth so much. You then have printed notes of five, ten, &c., dollars, to the amount stated by the appraisers to be the value of the house; on their face the notes state that they are a lien on the property, but that in case of public disturbance, and it becomes impossible to pay the notes, then they shall draw interest, which shall be paid when the note is paid. These notes have circulated very freely during the last year.

I have to add to the foregoing that there are four banks doing business in Barranquilla. Three of them have a combined capital of $1,060,000, the other being a branch of the National Bank at Bogota. The private banks are organized under the laws of the State of Bolivar, which are much the same as were those of the State of New York twenty-five years ago. The majority of the capital of the American bank here belongs to citizens of the United States, being divided as follows: Citizens of the United States, $295,000; British subjects, $260,000; Colombians, $10,000. The rates of discount are: Ninety days, 8 per cent.; one hundred and eighty days, 9 per cent.; rates of interest, 3 per cent. and 4 per cent. for one hundred and eighty and ninety days; rates of exchange on New York, 27 per cent., and 28 per cent. for sight drafts, and 25 per cent. and 26 per cent. for sixty and ninety days' drafts; on London, 24 per cent. and 25 per cent. For status of banks, see enclosed tabulated statements A, B, and C.

THOMAS M. DAWSON,
Consul.

UNITED STATES CONSULATE,
Barranquilla, June 14, 1883.

A.—*Public banks.*

Name of the bank.	Capital paid up.	Reserve.	Circulation.	Deposits.	Cash on hand.	Year of the organization.
Banco de Bogota	$349,500	$59,215	$530,565	$676,528	$655,109	1871
Banco de Colombia	272,108	24,600	446,305	447,593	353,109	1875
Banco Popular	12,525	3,060	97,155	200,844	197,613	1877
Banco de la Union	32,317	95	27,000	97,807	42,477	1881
Banco Nacional	1,100,000	22,139	389,956	82,237	381,834	1881
Total	1,766,450	109,109	1,490,981	1,505,009	1,630,142	......

Largest dividend paid in the year 1881 was that of "El Banco Popular," which was 32 per cent.
Total dividends paid to May 31, 1882, $695,069.

B.—*Private banks.*

Name of the bank.	Capital paid up.	Reserve.	Circulation.	Deposits.	Cash on hand.	Year of the organization.
Banco Americano	$150,000	$45,000 00	$140,250	$9,338 95	$94,792 00	1883
Banco de Barranquilla	220,000	18,209 91	250,000	215,951 70	253,940 00	1873
Banco de Marquez	62,500	....	187,500	....	120,810 60	1883
	432,500	63,209 91	577,750	225,290 65	469,542 60	......

Bank of Barranquilla pays about 6 per cent. in dividends.

C.—*New banks.*

The following are new banks that have been recently organized in various parts of the country:

	Capital paid up.
Banco de Cipaquira, State of Cundinamarca	$25,000
Banco de Tequendama, State of Cundinamarca	25,000
Banco de Boyaca, State of Boyaca	25,000
Banco del Norte, State of Santander	25,000
Banco del Occidente, State of Cundinamarca	25,000
Banco Industrial, State of Antioquia	60,300
Banco de Medellin, State of Antioquia	

COMMERCIAL, FINANCIAL, AND POLITICAL CONDITION OF THE ARGENTINE REPUBLIC.

REPORT BY MINISTER OSBORN, OF BUENOS AYRES.

The annual session of the Argentine Congress was opened to-day, the 4th instant, with the accustomed formalities, President Roca reading his message, a copy of which is herewith sent, to both houses, assembled in the Senate Chamber, and after which the President gave a reception.

The President opened his message by saying that no other President has had the satisfaction of opening Congress in an epoch of greater national happiness and prosperity.

The message is lengthy, but contains a plain statement of facts and official figures, and sets forth the real and true vitality of the nation, and the remarkable progress resulting from one year of peace and quiet and the temperate administration of public affairs.

Under the head of revenue, the President states that their trade and credit are in the ascendant with the general progress of the country. The sum collected in 1882 was $26,763,985, or an increase of 7.58 per cent. over 1881.

The revenue of the first quarter of the present year shows a proportionate increase over 1882, and is equal to 16.34 per cent. over 1881. The Government had expended for the ordinary concerns of the administration only $25,354,996.76, leaving a surplus of $1,408,988.

The total value of imports is $56,581,290, and of exports, $60,389,052, showing an increase of $2,450,865 over 1881. Up to the 31st of March of the present year the mint has placed in circulation 5,755,237 gold, silver, and copper coins, representing in all $4,154,519.16.

In the chapter of railways the President informs Congress that there are at work, on the ten railways now building and extending throughout the republic, fourteen thousand five hundred men; that the Andine line has been extended beyond the province of San Luis, having surmounted the greatest difficulties it had to encounter, and that at the end of this year the locomotive will have reached the foot of the Andes.

In speaking of the service in the postal and telegraphic communications, the President states that last year 17,757,610 letters and papers were dispatched, one-fifth of which were foreign, showing an increase of 20 per cent. over the year previous, and that the minister of foreign affairs had signed a convention with the Uruguayan Republic, as well as with Bolivia, to join telegraph lines, and that the Argentine and Brazilian had been joined at Uruguayana, thus opening another line of communication with Rio and Europe.

The President recommends a bill for abolishing postal and telegraph franking.

Under the head of foreign relations it is stated that the relations with nations of Europe are maintained without any alterations, and the Argentine Government is on friendly terms with all the American nations.

The President says he has devoted special attention to the subject of public instruction, which continues to awaken a lively interest throughout the republic, and that all the provinces have cheerfully conformed to the subventions. There are 1,505 schools supported by the nation, without counting the normal and application schools and those annexed to the national colleges, and 112,400 pupils attend.

The President concludes his message by expressing his intention, in view of the general prosperity of the country and its perfect order and tranquillity, of submitting to Congress a project for the reinstallment in their former places in the army all the officers who are living separated from the army on account of political dissensions, and says that we must forget that these officers forgot their duty to their country in order that we may remember that they have grown old in the service, and contributed not a little to its glory and prosperity.

THOS. O. OSBORN.

LEGATION OF THE UNITED STATES,
Buenos Ayres, May 4, 1883.

THE INDUSTRIAL PROGRESS OF CANADA.

REPORT BY COMMERCIAL AGENT ROBBINS, OF OTTAWA.

The industrial progress of the Dominion of Canada as shown in the census reports of 1881 (just published) and compared with 1871 is as follows:

Number of owners of land and acres owned.

Years.	No. of owners.	No. of acres owned.
1881	588,973	67,645,162
1871	Not given.	49,368,029
Increase		18,277,133

Number of houses, warehouses, factories, stores, shops, barns, and stables.

Years.	No. of houses.	No. of warehouses, factories, &c.	No. of barns and stables.
1881	712, 440	110, 170	860, 985
1871	339, 512	68, 914	695, 364
Increase	372, 928	41, 256	165, 621

Number of ships and their tonnage.

Years.	Steam.	Tonnage.	Sail.	Tonnage.
1881	721	200, 023	3, 909	7, 860, 450
1871	309	81, 374	3, 254	660, 440
Increase	412	118, 649	655	7, 200, 010

Statement showing the progress of manufacturing industries by provinces.

Provinces.	Years.	Capital invested.	No. of persons employed.	Amount of yearly wages.	Value of raw material.	Value of products.
Ontario	1881	$80, 950, 847	118, 308	$30, 604, 131	$91, 164, 156	$157, 989, 870
Do	1871	37, 884, 010	87, 281	21, 415, 710	65, 114, 804	114, 706, 799
Quebec	1881	59, 216, 992	85, 673	18, 333, 162	62, 563, 967	104, 662, 258
Do	1871	28, 071, 868	66, 714	12, 389, 673	44, 555, 025	77, 205, 182
New Brunswick	1881	8, 425, 282	10, 922	3, 866, 011	11, 060, 842	18, 512, 658
Do	1871	5, 976, 176	18, 352	3, 870, 360	9, 431, 760	17, 367, 687
Nova Scotia	1881	10, 183, 060	20, 390	4, 098, 455	10, 022, 030	18, 575, 326
Do	1871	6, 041, 966	15, 505	3, 176, 266	5, 806, 257	12, 338, 105
British Columbia	1881	2, 952, 835	2, 871	929, 213	1, 273, 816	3, 926, 784
Do	1871	Not given				
Manitoba	1881	1, 383, 331	1, 921	755, 507	1, 924, 821	3, 413, 026
Do	1871	No returns				
Prince Edward Island	1881	2, 085, 776	5, 767	807, 208	1, 829, 210	3, 400, 208
Do	1871	No returns				
The territories	1881	104, 500	83	35, 425	79, 751	195, 938
Do	1871	No returns				

RECAPITULATION, 1881.

Capital invested	$165, 302, 623
Number of persons employed	254, 935
Amount of yearly wages	$59, 429, 002
Value of raw material	179, 918, 593
Value of articles produced	309, 676, 068

Statement showing the progress of manufacturing industries in the principal cities of Canada from 1871 to 1881.

Cities.	Years.	Capital invested.	Number of persons employed.	Amount of yearly wages.	Value of raw material.	Value of products.
Ottawa	1881	$2, 408, 470	3, 945	$974, 382	$2, 999, 308	$4, 746, 090
Do	1871	1, 914, 287	3, 064	843, 521	2, 536, 654	4, 152, 960
Hamilton	1881	4, 825, 500	6, 493	2, 246, 127	4, 303, 693	8, 209, 486
Do	1871	1, 541, 264	4, 456	1, 329, 712	2, 860, 399	5, 471, 494
London	1881	3, 542, 509	4, 089	1, 260, 585	3, 888, 792	6, 223, 618
Do.	1871	1, 001, 789	2, 261	687, 473	1, 955, 303	3, 888, 792
Toronto	1881	11, 502, 216	12, 708	3, 721, 361	9, 761, 373	19, 100, 116
Do	1871	4, 036, 158	9, 400	2. 690, 993	7, 168, 993	13, 386, 093
Montreal	1881	30, 943, 743	32, 132	8, 630, 500	31, 345, 496	50, 598, 879
Do	1871	11, 101, 031	21, 187	5, 195, 668	19, 037, 962	32, 731, 966
Quebec	1881	4, 434, 784	8, 404	1, 605, 999	6, 001, 583	9, 789, 218
Do	1871	2, 870, 638	7, 250	1, 459, 279	4, 771, 459	8, 449, 752
St. John, New Brunswick	1881	2, 049, 694	2, 558	732, 450	2, 467, 125	4, 036, 733
Do	1871	1, 225, 942	4, 103	1, 080, 248	2, 815, 640	5, 094. 976
Halifax	1881	2, 205, 888	2, 588	732, 450	2, 467, 125	4, 036, 733
Do	1871	1, 492, 944	2, 167	732, 151	1, 331, 070	2, 817, 480

Statement of the number of domestic animals in Canada in 1881.

Horses	857,855
Colts	201,503
Working oxen	132,593
Milch cows	1,595,800
Other horned animals	1,786,596
Sheep	3,048,678
Swine	1,207,619

Statement showing the amount of various products of Canada for the year 1881, *as follows.*

FIELD PRODUCTS.

Apples	bushels	13,377,655
Barley	do	16,841,868
Buckwheat	do	4,901,147
Butter	pounds	102,545,169
Cheese	do	3,184,996
Corn	bushels	9,025,142
Flax and hemp	pounds	2,056,353
Flax seed	bushels	108,694
Grapes	pounds	3,896,508
Grass and clover seed	bushels	324,317
Hay	tons	5,054,810
Hops	pounds	905,207
Maple sugar	do	20,556,049
Oats	bushels	70,493,131
Potatoes	do	55,268,227
Rye	do	2,097,180
Tobacco	pounds	2,527,000
Turnips	bushel	39,059,094
Spring wheat	do	12,102,817
Winter wheat	do	20,247,752

FISHERIES.

Cod	quintals	1,130,771
Haddock and hake	do	192,359
Canned lobster	pounds	11,983,648
Various sorts of fish	barrels	1,254,025
Oysters	do	189,127
Fish oil	gallons	870,323

MINERALS.

Gold	ounces	70,015
Silver	do	87,024
Iron ore	tons	223,057
Coal	do	1,307,824
Gypsum	do	183,076
Phosphate rock	do	14,747
Mica	pounds	16,076
Petroleum	gallons	15,490,622
Salt	barrels	472,074

R. B. ROBBINS,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Ottawa, *May* 23, 1883.

HAYTIAN TARIFF CHANGES.

REPORT BY CONSUL GOUTIER, OF CAPE HAYTIEN.

The Haytian legislature at their extraordinary session enacted a law diminishing the export duties on coffee 33⅓ per cent. As the coffee crop is 60,000,000 pounds, and the duties $3 per 100 pounds, this makes

$1,800,000, one-third of which is $600,000, revenue which the Government relinquishes; but to equilibrate this 33⅓ per cent. has been added to all importations.

Inclosure No. 1 will show the mode of calculating the duties, with the 33⅓ per cent. additional.

No. 2 shows the heavy port charges.

I have selected, *pro forma*, a vessel of 400 tons. Omitting the charges for throwing away the ballast, at 25 cents per ton of ballast, the port charges amount to $1,141, and should, as some of our merchants suppose, the 33⅓ per cent. be added to the tonnage dues of vessels it will augment this sum, $133.34, making a total of $1,274.34.

I called this morning on the minister of war, and told him that although I know that it regards the minister of finances, still I desired to speak to him, informally, concerning the 33⅓ per cent. on vessels, which, I thought, would be a heavy additional tax should the new law on importations be so construed as to include them.

He replied that he did not think that the new law affects vessels; still I should bear in mind that he only expressed a personal opinion.

STANISLAS GOUTIER,
Consul.

UNITED STATES CONSULATE,
Cape Haytien, March 28, 1883.

No. 1.—*Mode of computing the import duties in Hayti on and after April* 1, 1883, *when the new tariff which adds* 33⅓ *per cent. on all importations will become effective* (*viz,* 33 *per cent. on first duty*).

One barrel of pork:	
First duty on 1 barrel pork	$1 50
Wharfage per barrel	12
Total first duty	1 62
50 per cent. additional	81
33⅓ per cent. additional on $1.62	54
Duties on 1 barrel pork	2 97
One hundred pounds of lard:	
First duty on 100 pounds lard	$1 00
Wharfage on 1 box lard	12
Weighing 100 pounds	5
Total first duty	1 17
50 per cent. additional	59
33⅓ per cent. additional on $1.17	39
Duties on 100 pounds lard, 2.15 cents per pound	2 15
One bale of denims, 500 yards = 400 ells:	
First duty on 400 ells denims, at 2½ cents	10 00
Wharfage on 1 bale denims, at 2½ cents	25
Total first duty	10 25
50 per cent. additional	5 13
33⅓ per cent. additional on $10.25	3 42
Duties on 400 ells denims, 4.70 cents per ell	18 80

No. 2.—*Port charges on a vessel of* 400 *tons at Cape Haytien.*

First duty, viz, $1 per ton			$400 00
50 per cent. additional			200 00
			600 00
Inward pilotage (pilot's share)		$8 00	
Look-out man (man's share)		1 00	
Inward pilotage (Government's share)	$8 00		
Look-out man (Government's share)	1 00		
	9 00		
20 per cent. additional	1 80		
		10 80	
Outward pilotage (pilot's share)		5 00	
Outward pilotage (Government's share)	5 00		
20 per cent. additional	1 00		
		6 00	
			30 80
Interpreter			2 00
Stamp paper			10 50
Health officer (doctor's share)		8 00	
Health officer (Government's share)	8 00		
50 per cent. additional	4 00		
		12 00	
			20 00
Custom-house clerk to seal hatches			5 00
Fountain (when there is water running)			10 00
Clearance at the custom-house		5 00	
Clearance at the Administration of Finances		5 00	
Clearance at the Bureau du Port and at Bureau de la Place		2 70	
			12 70
			691 00
N. B.—The vessel pays 25 cents per ton to the captain of the port for discharging her ballast.			
The vessel paying her own port charges pays for lighters to convey the logwood at the rate of 50 cents per 1,000 pounds French weight; consequently a vessel of 400 tons loading 900,000 pounds pays for lighters			450 00
			1,141 00
The new tariff which adds 33⅓ per cent. on all importations on and after April 1 proximo will be added to the first duty of $1 per ton, viz, 33⅓ per cent. on $400			133 34
Total port charges according to the new tariff			1,274 34

COMMERCE AND PRODUCTS OF GREECE.

REPORT BY CONSUL-GENERAL SCHUYLER, OF ATHENS.

While, in addition to our own consular reports, valuable accounts of the special trade of Patras, the Piræus, Syra, and other Greek ports, by British and Belgian consuls, have been published, I have been able to find no view of the foreign commerce of Greece as a whole since the report of Mr. Wyndham, secretary of the British legation at Athens, dated December 4, 1876. No Greek official statistics have been published since that time, although data from the Government offices have been kindly communicated to me. The information which follows is, therefore, somewhat fragmentary and scanty.

According to Greek official statistics the foreign trade of Greece, exclusive of the transit trade, has been since 1861 as follows. I go thus far back for the purpose of comparison. For the years 1875 and 1876 I have been unable to procure returns:

Years.	Imports.	Exports.
1861	$8, 332, 875	$4, 888, 197
1862	7, 674, 517	4, 874, 373
1863	9, 845, 023	4, 005, 310
1864	9, 562, 207	4, 383, 507
1865	18, 131, 022	7, 210, 935
1866	13, 403, 716	7, 232, 358
1867	13, 066, 182	8, 497, 867
1868	12, 897, 130	7, 056, 610
1869	14, 623, 617	8, 116, 426
1870	14, 867, 397	6, 600, 968
1871	16, 967, 950	10, 823, 619
1872	17, 229, 235	9, 774, 124
1873	16, 032, 608	11, 214, 392
1874	17, 182, 160	11, 330, 000
1877	16, 977, 676	9, 418, 135
1878	18, 994, 944	6, 774, 982
1879	17, 692, 694	7, 791, 454
1880	19, 847, 584	7, 249, 348
1881	19, 075, 825	11, 775, 738
1882 (first half)	13, 433, 050	4, 661, 308

By this it will be seen that both imports and exports have doubled in the last twenty years.

Taking the mean of the imports and exports for the last five years they were as follows:

Imports.	Per cent.	Exports.	Per cent.
From England	26. 5	To England	51. 4
Austria-Hungary	20. 0	Austria-Hungary	10. 5
Turkey	17. 8	Turkey	8. 8
France	14. 1	France	10. 2
Russia	11. 3	Russia	3. 8
Italy	5. 5	Italy	4. 1
United States	1. 9	United States	2. 7
Belgium	0. 9	Belgium	0. 9
Other countries	2. 0	Other countries	7. 5
Total	100. 0	Total	100. 0

The chief ports for the foreign trade of Greece are the Piræus (including Athens), Syra, Patras, and Corfu. Then come Cephalonia, Nauplia, Kalamata, Chalcis, and Volo. The trade at Missolonghi and Katakolo is rapidly increasing, and the latter port, which is now connected by a small railway with Pyrgos, bids fair to become the principal port on the western side of the Penoponnessus and to rival Patras.

The chief articles of export from Greece in 1881 and the first half of 1882 were the following:

Articles.	1881.		1882—6 months.	
	Amount.	Value.	Amount.	Value.
I.—ANIMALS AND ANIMAL PRODUCTS.				
Cattle ..... head	1,019	$2,793	16,359	$35,534
Hides and skins:				
Raw ..... pounds	871,161	171,292	1,419,510	249,124
Prepared ..... do	305,809	61,418	102,767	21,900
Bones ..... do	467,000	14,550	92,373	1,113
Cheese ..... do	639,446	47,492	140,004	5,105
Honey ..... do	62,409	4,891	5,875	345
Cocoons ..... do	27,138	16,460	44,811	14,160
Silk ..... do	2,065	4,052	13,134	71,733
Wool ..... do	633,019	47,406	216,018	15,460
II.—MINERALS AND MINERAL PRODUCTS.				
Emery ..... pounds	1,648,200	24,556	615,000	10,434
Lead ..... tons	11,705	992,973	6,540	607,119
Zinc and zinc ore ..... do	40,278	2,725,137	16,990	473,983
Iron and other ores ..... do	6,653	198,580	8,768	20,201
Santoxin earth ..... do	130	1,756	71	965
Millstones ..... pieces	2,993	2,519	11,630	4,073
III.—VEGETABLES AND VEGETABLE PRODUCTS.				
Cereals ..... bushels	1,602	26,011	319	4,293
Flour ..... pounds	321,323	10,480	205,863	7,596
Madder ..... do	26,492	234	....	....
Anise seed ..... do	251,614	17,095	17,000	765
Sumac ..... do	....	....	835,497	4,300
Valonia ..... tons	2,430	85,463	6,197	222,657
Tobacco ..... pounds	1,260,900	91,921	1,406,011	96,823
Cotton ..... do	104,335	9,740	813,153	21,586
Cotton yarn and tissue ..... do	741,106	134,826	265,720	53,305
Cotton seed ..... do	2,100,786	21,200	....	....
Olives ..... do	591,648	18,367	1,558,535	67,181
Olive oil ..... do	23,055,386	1,168,284	1,953,160	135,269
Lemons and oranges ..... pieces	5,788,982	13,146	2,309,258	6,334
Other fresh fruits ..... pounds	397,244	7,148	129,215	1,370
Figs ..... do	1,951,456	50,419	2,072,673	51,601
Currants ..... do	167,084,501	5,816,954	45,490,028	1,411,449
Raisins and other dried fruit ..... do	8,282,264	89,132	600,188	6,124
Vines ..... do	18,253,754	424,010	10,533,344	856,009
Vegetables ..... do	1,297,944	14,235	407,185	2,597
Soap ..... do	2,128,053	123,946	770,318	69,460
Rags ..... do	804,696	6,954	535,603	4,825

The exports of Greece, consisting chiefly of raw materials, are more easily considered if we classify them according to their origin.

Animals and products.—Beginning with animals and animal products, we find that few cattle are exported from Greece, and this only to neighboring countries, far more being imported in return for the food of the inhabitants.

Hides, skins, and leather are exported chiefly to Austria, Hungary, and in much smaller quantities to France, Turkey, and Russia. There are well-mounted tanneries at Syra and Phaleron, which consume most of the raw hides and skins.

The importation of these articles amounts to nearly $1,500,000. There is an increasing exportation of cheese, while butter is imported from Turkey and Russia, as well as from Italy, England, and Denmark, to the value of $100,000 yearly.

Honey.—The honey of Mount Hymettus, which is celebrated for its aromatic taste, is exported in small quantities to Russia and Western Europe. It is, however, chiefly mixed with the comb, and does not fetch as high a price as it would if more pains were taken in its production. The bees are considered good, being much like Cyprus bees, and specimens have recently been sent to the United States by an agent of some bee associations. As yet almost no one in Greece has observed scientific methods in the case of bees.

Were more attention given to apiculture, the production of honey of prime quality could be largely increased.

Sponges.—The export of sponges is chiefly to France, although a considerable quantity is sent to England and Turkey. The center of the trade is at Syra. The value exported is about $60,000 annually.

Silk is produced chiefly in the district of Kalamata, and at one time this industry was very important. Of late years, however, it has greatly fallen off, and the silk spinning establishment at Kalamata finds scarcely enough to support itself.

Wool.—Sheep and goats being raised in very large quantities in Greece, the production of wool is comparatively great, but it is chiefly used in the country for making the rough cloth and felt of the peasantry.

Minerals.—Greece is rich in mines and quarries, some of which have long been worked, and others are now being investigated for the first time. The mines at Laurium and along the coast to Sunium give argentiferous lead and calamine. The Hellenic Company of Laurium produces annually about 10,000 tons of lead containing on an averge 6½ ounces of silver. The French Company of Laurium produces little lead, but exports about 30,000 tons of calamine.

Three companies—French, English, and Greek—at Antiparos are also working calamine, and produced last year about 4,000 tons.

Millstones are produced at Milos, where the quarry belonging to the Government has recently been let at $5,000 a year. *Emery* comes chiefly from the island of Nayos, though existing in other islands, and is worked by the Government. There are excellent beds of *magnesite*, especially in Eubœa, which it is the intention to work. *Lignite* is also found in Eubœa although it produces only about 10,000 tons annually.

Iron.—The iron mines of Seriphos give an *iron ore* containing manganese. They are worked by a French company.

Marble.—The marble quarries of Mount Pentelicus, near Athens, are rudely worked and furnish a supply only for Athens and the Piræus. In the island of Paros, a Greek (formerly a Belgian) company has undertaken to work the marble quarries on a large scale. It has a capital of $850,000, and has adopted the latest Belgian methods.

Sulphur is being refined to some extent in the island of Milo.

An excellent account of the mines of Greece up to that time will be found in the report sent by Mr. Francis, June 14, 1873, No. 129, published in the Commercial Relations for 1873.

Cereals.—Not enough *cereals* are produced for the consumption of Greece, but still a certain amount of wheat and barley is exported from Thessaly, the wheat there being very hard and firm and excellent for the manufacture of macaroni. In all about 15,000 acres are planted with wheat and barley. The import of cereals averages over 30,000,000 bushels yearly. The harvests for this year, 1883, are exceptionally good so far.

There is a small exportation of *madder*, which is raised in Thessaly, but little cultivated since the introduction of mineral colors; *hemp seed* and *anise seed*, which are cultivated near Thebes and in Peloponnesus.

Valonia.—The crop of *valonia* is more important; it is raised chiefly in Ætolia, Acarnania, and the Peloponnesus. It is chiefly taken up by tanneries of Syra and Phaleron, but a certain quantity is exported to Austria-Hungary, England, and Italy. Both in 1881 and 1882 the crop was very short, being estimated in 1881 at 10,600 tons, and in 1882 at

4,952 tons. Nevertheless the exports for the first half of 1882 were nearly three times as great as during the whole of the year 1881.

Tobacco.—The best *tobacco* is that from Agrinion, which is more aromatic and stronger than other Greek tobacco. Choice leaves sell for 140 francs per 100 kilograms. Vrakhori, another choice tobacco, sells on the spot at about the same rate.

The tobaccos of Eubœa and Armyro in Thessaly are of good quality and are exported on a large scale to the East and to Russia, the average price being about 1.35 francs per kilogram.

The tobacco of Argos is of an inferior quality, selling in the country and in the East for about 85 centimes a kilogram, while that of Lamia and of Volo, of fair average quality, brings about 1 franc per kilogram.

Cotton is produced in large quantities in Thessaly as well as near Thebes and Livadia. It sells generally at 1.30 francs per kilogram, and is chiefly absorbed by the factories at the Piræus.

Fruit.—The great export of Greece consists of *fruit*, especially of currants, raisins, oranges, and lemons. Figs and almonds, although produced everywhere, are not exported to any large extent. The exportation of olives in 1881 was 591,648 pounds, and that of olive oil 23,055,386 pounds, worth $1,168,284. The oil went chiefly to Italy, England, and Russia. The product of this oil in 1882 was very good, and is estimated at 10,000 tons. The number of *lemons* and *oranges* exported in 1881, chiefly to Turkey, was nearly six millions. The export of citrons was about 6,000 pounds.

The lemon culture was greatly injured a few years ago by very cold weather, and by a disease which appeared in Poros and the neighboring regions, where the best orchards are situated, and destroyed very many trees.

THE CURRANT EXPORT.

According to the statements of the English consul at Patras, the crop of *currants*, as the small raisins coming originally from Zante are known in commerce, was in 1878 100,004 tons; in 1879, 92,000 tons; in 1880, 92,337 tons, worth $7,773,000; in 1881, 122,000 tons, worth $11,372,000; and in 1882, 107,000 tons, worth $10,400,000.

The crop of 1882 would have been as much as 130,000 tons had it not been for the bad weather.

The crop for 1883 is estimated at 140,000 tons if the rains come at the proper time. Everything now points to a very good crop.

Up to the last few years the currants were chiefly disposed of in England and the United States; England taking 50,000 tons or more, and the United States from 5,000 to 14,000 tons. But the constant increase in consumption, and therefore in price, led to the planting of a large number of new vineyards. The merchants at Patras, which is the center of this trade, shook their heads at this, and predicted a fall in prices and disaster to the country. Fortunately their predictions were falsified by a sudden demand for large quantities of currants for France in consequence of the failure of the grape crop, it being found that excellent wine and brandy could be made from currants.

It is thought that the high duty recently imposed upon them in Russia will prevent the export to that country, where people also began to distill them. On the other hand a very large Australian trade is expected by Brindisi and the Peninsular and Oriental steamers.

The shipments of currants during 1881 and 1882 were as follows:

To—	1881.	1882.
	Tons.	*Tons.*
Great Britain	56,964	51,933
France	17,766	15,478
United States	10,340	13,917
North of Europe	9,215	5,789
Trieste	2,603	1,868
Canada	1,444	1,187
Russia	558	24
Australia	1,142	480

Wine.—The annual production of wine is estimated at about 33,000,000 gallons. The export of wine for 1881 amounted in value to $424,000 and in the first half of 1882 to $356,000. More than half of this quantity was sent to France, much smaller quantities being exported to Austria-Hungary, Russia, Turkey, and Italy. Wines generally throughout Greece are very badly made and are mixed with alum and resin in order to keep them. Where they are made with more care, as near Athens, Corinth, Patras, and in some portions of Eubœa and the islands they are of good quality and pleasant flavor, though rather strong. They are now chiefly exported to mix with weaker French wines for the manufacture of claret. In the island of Santorini a white wine called *Nino Santo* is produced, which somewhat resembles Constantia, and the average value of which is 75 francs per hectoliter. A Muscat wine is made in Eubœa to a very limited extent, selling at 85 francs per hectoliter free on board. Malvoisie wine from Monembasia in the Peloponnesus, the reputation of which dates back for centuries, sells at 75 to 80 francs per hectoliter.

Spirits-raki, a kind of brandy flavored with resin, mastic, and aniseseed, is very largely made in Greece and very largely consumed.

The exportation of spirits is now increasing.

TRADE BETWEEN GREECE AND THE UNITED STATES.

According to the Greek official statistics, which speak of the direct trade only, the exports to and the imports from the United States were as follows:

Years.	Imports.	Exports.
1877	$293,002	$219,911
1878	352,798	700,116
1879	272,729	1,419,508
1880	475,716	1,731,765
1881	329,834	1,804,764

According to information furnished me by Mr. Hancock, our consul at Patras, the trade with the United States for the last three years has been as follows:

1880.

Exports.—In these there was a falling off owing to the crop of currants having been seriously damaged by rain.

According to the invoices certified during that year the exports to the United States consisted of—

	Value
5,972 tons currants	$468,806 79
Wine	202 62
Soap, 27,650 pounds	1,514 88
Oil, 5,776 pounds	400 36
Goat skins	937 50
Tobacco	142 00
Total exports	472,004 15

Imports (direct), 18,878 cases petroleum, valued at about $22,882.

1881.

Exports.—These consisted solely of currants, and were as follows: 10,343 tons, valued at $942,470.

Imports, 190,103 cases petroleum, valued at about $230,465.

1882.

Exports:	Value.
Currants, 13,917 tons	$1,180,644 00
Olive oil foots	781 68
Olive oil soap	511 83
Total	1,181,937 51
Imports.—63,351 cases petroleum	$81,308 20

It will be seen that the chief exports to the United States are *currants.* A considerable quantity of these that go to the United States are sent via London or Liverpool.

The direct shipments of currants to the United States from 1865 to 1882 inclusive were:

	Tons.
United States import duty 5 cents per pound:	
1865	1,411
1866	2,637
1867	2,182
1868	2,808
1869	1,143
United States import duty 2½ cents per pound:	
1870	3,356
1871	5,020
United States import duty 1 cent per pound:	
1872	4,458
1873	6,280
1874	6,129
1875	8,379
1876	7,804
1877	6,325
1878	9,146
1879	9,112
1880	5,972
1881	10,343
1882	13,917

Almost the sole import is *petroleum.* I have heard that large quantities of petroleum coming originally from the United States are smuggled into Greece from Turkey, where the import duty is far lower. It is landed in small lots from small vessels on the rocky coasts of the Greek islands.

It might be possible to send dried cod-fish and salted fish here, which is largely used. About fifteen cargoes yearly come from Newfoundland, in all from 45,000 to 50,000 quintals.

The vessels which arrived at Patras, Corfu, and Zante from and sailed to the United States in the last three years, were as follows:

In the year 1880: Arrived, at Patras, 1 sailer; at Corfu, 1 sailer, and 2 steamers; total, 4. Sailed, from Patras, 8 steamers; from Zante, 3 steamers; total, 11.

In the year 1881: Arrived, at Patras, 1 sailer; at Corfu, 4 sailers; total, 5. Sailed, from Patras, 4 steamers; from Zante, 3 steamers; total, 7.

In the year 1882: Arrived at Patras, 2 sailers; at Corfu, 2 sailers; total, 4. Sailed from Patras, 11 steamers, 1 sailer; from Zante, 4 steamers; total, 16.

For importations from the United States the chief ports are the Piræus, Patras, and Corfu.

For ordinary freight there is direct communication between New York and the Piræus by the Florio (Italian) steamers, with only one transshipment. Steam freight from Patras to the United States is from 32*s.* 6*d.* to 40*s.* and 10 per cent. per ton of goods.

Owing to the defects in the Greek statistics, and their distinction between general and special commerce, it is impossible to trust implicitly the statistics already given, which are probably too small rather than too large, or to ascertain the amount of transit trade. This may be estimated at between $3,000,000 and $4,000,000 each way.

REVENUE AND FINANCE.

The customs revenues of Greece are as follows. Certain years, owing to insufficient returns, are given from the budget estimates:

1871	$1,731,937
1872	1,819,737
1873	1,838,855
1874	1,721,764
1875 (budget estimates)	2,139,033
1876 (budget estimates)	2,000,000
1877 (budget estimates)	2,330,430
1878 (budget estimates)	2,152,584
1879 (budget estimates)	2,751,306
1880 (budget estimates)	2,947,895
1881 (budget estimates)	4,051,664
1882	4,882,594

In the year 1881 there came from the newly annexed provinces of Thessaly $147,837, and in 1882 $356,783.

Among the reasons which prevent the still greater development of commerce in Greece, and in general the well-being of the people, are bad government, bad finances, including heavy taxes, and the want of internal improvements and the means of communication.

These are now being remedied.

The present ministry is one of the purest that has ever been in office, and is conscientiously endeavoring to promote honesty among the officials, the proper execution of the laws, and the exact administration of justice.

For the first time since 1862, in the estimates of the budget, the revenue equals the expenditure.

Heretofore there have been heavy deficits. The old system of tithes on the produce of the land, by which the cultivators of the soil paid one-tenth of the produce in kind to the Government, which had come down from Turkish time, and which was most burdensome on the peasants, has been abolished.

The tithe was especially oppressive because it was collected by farmers of the revenue, who, from fear lest they might lose, took always more than they should, and the peasant was prevented from selling his grain or even thrashing it until the tithe was paid. It was, therefore, exposed to the chances of the weather. For this tithe a tax on cattle and land has been substituted.

This change was made two years ago, and the good effect is already apparent.

For some time past the paper currency of the Greek banks has been about 12.3 per cent. below par, and another complication has been caused by the fact that, while the money actually used is in new drachmas or francs, the money of account has been old drachmas, 10.7 per cent. less than the new, and for which there is no corresponding coin.

By a law passed last November the new drachma, or franc, is in all cases substituted for the old drachma, and one of the troubles has been obviated.

It is hoped that with two or three years of prosperity and a balanced budget it will be possible to repay to the banks the money advanced by them (about $14,000,000), and that a return can be made to specie payments.

HIGHWAYS AND RAILROADS.

The want of roads has long been a reproach to Greece. The present ministry has taken up this subject warmly, and, in addition to other projects, has called a commission of French engineers to decide upon roads and to survey for railways. It is proposed to make several networks of roads, and to intrust their building to contractors taken from various countries, so as to entice foreign capital into Greece. Up to the present year but one railway has existed in Greece—from Athens to the Piræus, a distance of 5¼ miles. A few months ago another short railway was opened on the western coast of Peloponnesus, from the port of Katakolo to the town of Pyrgos, 8 miles. A railway is now in course of construction from the Piræus and Athens to Patras by the way of Corinth, about 136 miles, and it is expected that it will be opened from here to Eleusis in the autumn. Another railway is projected from Athens to the mines of Laurium, 36 miles. The concession has been given, but no work has yet been done.

Work is being actively pushed on the Thessalian railways from Volo, the chief port, to Larissa, the capital of the province, with a branch from Velestina to Kalabaki; in all, 128 miles. This is to be part of the great railway line which is to connect Athens with the rest of Europe. A connecting link will be made from Athens through Lamia to the Thessalian railway. It is expected that the same company will build a railway on the Turkish side of the frontier, connecting Thessaly with Salonica and the railway which now runs from that point northwards, and is shortly to be prolonged to Belgrade and Vienna.

Two lines of tramway have been laid down in Athens, as well as a steam tramway from Athens to Phaleron.

WATER COMMUNICATION.

Work is being done on the canal across the Isthmus of Corinth, and it is hoped to finish it in four years. Not much progress has yet been made, and the engineers of the work, which is a private enterprise undertaken by foreign capital, claim that they are waiting for certain machines ordered in France and Belgium, which will not be delivered until December. This canal will greatly shorten the distance between the Adriatic and the Dardanelles, and it is thought that the tolls received from the Austrian Lloyd and the Italian steamship companies alone will be sufficient to pay the interest on the investment. Lake Copais, a pestilential marsh in Bœotia, is being drained, and it is estimated that by this over 50,000 acres of excellent land will be of use for agriculture.

Works are also in progress for the improvement of the ports of Patras, Katakolo, Kalamata, Andros, Syra, and the Piræus.

STEAM COMMUNICATION.

Greece is now in easy communication by sea with the rest of the world. The French companies of the Messageries Maritimes and Fraissinet, the Italian company Florio-Rubattino, the Austro-Hungarian Lloyd, and the Egyptian Khedivié stop regularly every week at the Piræus, besides the freight steamers which run more or less irregularly from England and other countries from Patras and Syra.

Three Greek companies, owning about 300 steamers, make a regular, frequent service between the isles and the various ports of the Greek mainland.

The sailing fleet of Greece is estimated at 6,700 coasters and 5,200 sea-going vessels, manned by about 28,000 sailors.

In 1881 the number of foreign steam vessels which entered and cleared from the port of the Piræus was 874, with a tonnage of 900,459.

EUGENE SCHUYLER.

UNITED STATES CONSULATE-GENERAL,
Athens, April 28, 1883.

AGRICULTURAL PROGRESS IN THE ARGENTINE REPUBLIC.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

Considering the interest which the United States, as a great grain-producing country, has in the question of the future food supply of the world, I have deemed it of some interest to consider the present condition and prospects of agriculture in the Argentine Republic; and the result of my investigations, after many difficulties in obtaining reliable information in the general absence of statistics, is the report which I now inclose. It attempts to give a glance at the early history of terraculture in this country, the difficulties it has had to contend with, the efforts made of late years for its promotion, the approximate breadth of land now in cultivation, the different crops which are grown, the imports and exports of cereals for the last twelve years, and the general agricultural outlook of the country.

Our agriculturists may not be aware of the fact that the Argentine Republic is looking forward to a time when it will successfully compete with the United States in furnishing food to the people of England and the European continent. I do not think that such an event will happen in the very near future; but it is a fact that the Argentine Republic is making gigantic strides in the development of its agricultural resourcse, and shows an annually increasing surplus of breadstuffs for exportation.

OLD THEORY THAT THE PAMPAS COULD NOT BE CULTIVATED.

This development is all the more marvelous for the reason that from the time of the Spanish conquest until within the last few years the upper portions of the country have been too remote and inaccessible to market to make agriculture an object among the people, while it has been the general belief that the pampa provinces were not suitable for agricultural purposes. Even Dr. Burmeister, the celebrated German scientist, now in charge of the Argentine National Museum, has only recently expressed a similar opinion, insisting that the principal occupation of the country, in view of the disposition of the soil, must continue to be the breeding of cattle and sheep, although he admits that "small portions of it may be changed into cultivated fields, and in others abundant orchards may be created."*

It is true, however, that the business of cattle and sheep breeding has these many years been so lucrative and so easy that the indolent gauchos, much less the owners of these immense flocks and herds, could have no object in changing it for an occupation so exacting and laborious as the cultivation of the soil; and it is only since the recent impetus which agriculture has received by the advent of European immigration that the plow may be really said to have commenced its civilizing work in the Argentine Republic. The French and Spanish Basques, and especially the Italians, who are now seeking new homes in the River Plate country, are, however, quite upsetting all the old, preconceived ideas about the pampas, and wherever they can obtain a foothold upon them they are gradually wresting them from the dominion of the cattle *estanciero*.

ANALYSIS OF THE SOIL.

Our own experience with reference to the great western plains of the United States, which in all their essential particulars correspond to the Argentine pampas, has long since not only exploded the theory that a soil without trees is necessarily unfit for general cultivation, but it has done more, and proved that our most important grain-producing regions are the States of Illinois, Missouri, Iowa, Nebraska, and Kansas, all of which were primitively in great part devoid of timber. The same fact, in my opinion, will yet be made plain with reference to the immense pampas of this republic. There is no doubt that they possess all the primary conditions for the successful prosecution of agriculture. While the climate is in the highest degree favorable for the cultivation of the soil, the soil itself is astonishingly fertile; Professor Girsebach, the celebrated phytogeographer, says "excessively" fertile and hardly to be surpassed anywhere, "offering at least as favorable a field to agriculture as the Far West of the United States of North America." Professor Doering, of Cordoba University, who has made a careful chemical analysis of the soil of the pampa, says:

---

* Dr. Burmeister, in an explanatory note, vol. 1, page 190, of his great work, "*Description Physique de la Republique Argentine,*" says: "It is an old maxim, based upon experience, that to undertake agriculture upon a new soil is not advantageous, except where a naturally existing vegetation can be cut down to put another in its place: this last is always the inferior in the point of view of the organization of vegetables, and that which has disappeared is superior. It is thus that coffee is cultivated in Brazil by destroying the magnificent virgin forest, and substituting it by the feeble bosket of the coffee plant. But the pampa, even in its fertile parts, only produces a miserable herbaceous vegetation, with less than a spear of wheat, with which it is desired to replace it. That will not do; moreover, it will never do. The pampa ought to remain the land of pasturage; it admits of formal working in certain favorite places, but it will never form in general a cultivable soil; only that which the earth contains, or something similar to it which it has artificially appropriated, can be withdrawn from it, but you cannot give it that which it cannot produce. This is a certain result, as Leibig, for the rest, has demonstrated in his work, "Chemistry applied to agriculture."

> Except in those parts where an accumulation of soluble salts in the liquids of the earth has occurred, and which are limited to certain localities, the lands, wherever natural or artificial resources of water are sufficient to guard against the unfavorable effects of drought, are found to produce satisfactory harvests, thus justifying the hopes founded on their composition, which is in the view of agricultural chemistry so favorable.*

PRIMITIVE AGRICULTURE OF THE NATIVES.

It must not be understood, however, that until the impulse it received from immigration, agriculture was an unknown or an unattempted occupation in the Argentine Republic. While this is almost true in regard to the pampa regions, in the upper interior provinces it has a history which dates back beyond the settlement of the North American colonies, and during all the long years which have elapsed since the Spanish conquest that portion of the country has continued to raise sufficient breadstuffs for the consumption of the sparse population which inhabits there. This is especially true of the provinces of Mendoza, San Juan, Rioja, Catamarca, Salta, and Jujuy.

In those early days, however, the tillers of the soil were not the Spanish conquerors of the country, but the very Indians whom they had subdued, and who were reduced to a kind of slavery and compelled to do this work. The various tribes, long before the discovery of America, had adopted many of the ways and means of civilized life. Their knowledge of agriculture they had acquired from the primitive inhabitants of Peru, who, it will be remembered, had attained under the Incas to no mean condition of civilization. Mr. Prescott in his history of the conquest of that country† tells us that the ancient Peruvians not only surpassed every other American race in their dominion over the earth, but that they pursued husbandry on principles that may be truly called

---

*Dr. Doering in his report says: "As a proof of this assertion I will insert the composition of the Nile mud or sediment, known since time immemorial for its fertility, according to the analysis of Johnson (*Pharmaceut. Centralbl.* 1852, s. 152), and compare it with the soil of Villa Maria.

Composition.	In aggregate.		Soluble.		Insoluble.	
	Nile mud.	Earth from Villa Maria.	Nile mud.	Earth from Villa Maria.	Nile mud.	Earth from Villa Maria.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Oxide of potassium	1. 26	2. 852	1. 26	0. 611	....	2. 241
Oxide of sodium	0. 89	2. 633	0. 89	2. 835	....	0. 248
Oxide of calcium	5. 43	3. 568	3. 89	1. 490	1. 54	2. 678
Oxide of magnesium	2. 73	1. 954	2. 26	1. 641	0. 49	0. 313
Sesquioxide of iron	13. 19	4. 741	11. 22	3. 911	1. 97	0. 830
Sesquioxide of aluminum	12. 12	16. 673	6. 75	8. 540	5. 37	8. 133
Silic acid and sand	62. 39	59. 941	4. 30	12. 627	58. 90	47. 314
Phosphoric acid	(*)	0. 517	....	0. 160	....	0. 367
Sulphuric acid	0. 22	Vestiges.	0. 22	Vestiges.	....	....
Hydrochloric acid	0. 03	Do.	0. 03	Do.	....	....

* Not designated.

If, notwithstanding this, the so highly favored soil of the pampas only possesses an insignificant vegetation, the reason must be sought for in the fact that as yet it has not been able to produce a sufficiently thick stratum of *humus*, or on account of the singular condition under which the soil of the pampa is found, to wit. a want of satisfactory drainage and of abundant meteoric precipitations.

†Prescott's Conquest of Peru, vol. i, p. 130, *et seq.*

scientific. It was the basis of their political institutions, and, as they had no foreign commerce, it was agriculture that furnished them with the means of their internal exchanges, their subsistence, and their revenues, every man being required to assist in the cultivation of the land. And for this purpose, in the absence of rain, they not only brought water for irrigating purposes down from the mountain slopes in aqueducts, but they cultivated the precipitous sides of the sierras, cutting them into terraces faced with rough stones. They were likewise well acquainted with the different kinds of manures, and made large use of them, especially of the *guano*, which existed in such immense quantities on the adjacent islands—a condition of intelligent labor which was not elsewhere to be found among the primitive tribes of America. It is true they had no knowledge of the plow, using instead a sort of wooden spade, but under their patient and discriminating culture we are told that every inch of good soil was tested to its utmost capacity of production, while the most unpromising spots were compelled to contribute something to the subsistence of the people. In his celebrated march over the Andes to the sacred city of Pachecarra, even Pizarro was surprised at the cultivated appearance of the country.* It is not strange, if, under these circumstances, the indigenous tribes, who occupied those portions of what is now the Argentine Republic, lying almost adjacent on the eastern slopes of the Andes, learned many of the mysteries of agriculture from their Peruvian neighbors. It is known that they were well acquainted with many of their usages, and were quite experienced in the cultivation of the soil. So that really the Spaniards, who subsequently occupied and colonized those portions of the country, for all the upper Argentine provinces were originally colonized from Peru, and were at one time a portion of that vice royalty,† only adopted what was already established, and succeeded in giving to agriculture an importance which those provinces have, very feebly perhaps, continued to sustain, the flour surplus of San Juan, Mendoza, and other places in the far interior, until very recently, finding an outlet and market in Buenos Ayres in times of great scarcity,‡

---

*The table-land and its declivities were thickly sprinkled with hamlets and towns, some of them of considerable size; and the country, in every direction, bore the marks of a thrifty husbandry. Fields of Indian corn were to be seen in all its different stages, from the green tender ear to the yellow ripeness of harvest time. As they descended into the valleys and deep ravines that divided the crests of the Cordilleras, they were surrounded by the vegetation of a warmer climate which delighted the eye with the gay livery of a thousand bright colors and intoxicated the senses with its perfumes. Everywhere the natural capacities of the soil were stimulated by a minute system of irrigation, which drew the fertilizing moisture from every stream and rivulet that rolled down the declivities of the Andes, while the terraced sides of the mountains were clothed with gardens and orchards that teemed with fruits of various latitudes. The Spaniards could not sufficiently admire the industry with which the natives had availed themselves of the bounty of nature, or had supplied the deficiency where she had dealt with a more parsimonious hand. (Prescott's Conquest of Peru, vol. 1, page 446.)

†Dominguez in his History of the Argentine Republic, page 54, says: "The colonization of the country was made from two different directions: the littoral or that portion adjacent to the Uruguay and Parana rivers by expeditions directly from Spain, while the interior was settled from Peru. This fact for some time caused a division of the Government. Subsequently, however, all the territory was attached to the vice-royalty of Peru."

‡There has certainly been a sad degeneration in most of the Indian tribes of the Argentine Republic since those early times; yet it is stated as a historical fact that the language spoken by the ancient Peruvians, or at least those who inhabited the ancient city of Cuzco, is the identical Quichua language which is at the present day almost universally spoken by the lower classes, including Indians and *Mestizos*, of the upper interior provinces of the Argentine Republic, very few indeed even understanding the Spanish language.—(See Antiquities of Ethnology of South America, by *William Bollaert*, F. R. G. S., Trübner & Co., London, 1860, page 166.)

PRODUCTIONS OF THE UPPER PROVINCES.

Before the Conquest, the productions of the upper provinces were the cassavara, the banana, the maguey, rice, potatoes, and maize or Indian corn. The latter, however, was the most important crop of the early inhabitants. With the advent of the Spaniards other products indigenous to Europe were speedily introduced, producing even more bountifully than on their native soil, such as the grape, the apple, the olive, the pear, the peach, the fig, the orange, the sugar-cane, and especially the various cereals, such as wheat,[*] oats, barley, rye, &c. During all the years, however, that this country was a dependence of Spain but little interest was felt in the advancement of agriculture, from the fact that under the exclusive policy which actuated the mother country the exportation of the products of husbandry was strictly prohibited. The result was that the people more and more directed their attention to mining for gold and silver, or to the less laborious occupation of sheep and cattle breeding,[†] and finally even in the upper interior portions of the country, where the cultivation of the soil received its first impulse, only enough breadstuffs were produced to supply a very sparse population; while in the provinces of the littoral, *i. e.*, those bordering on the Uruguay and Parana Rivers, the supply was in great part obtained from abroad—rather a meager supply indeed, since up to a very recent period meat was almost the exclusive food of the inhabitants of the pampas. What flour was consumed came principally from Chili and the United States; and this portion of the country, even within the last few years, in seasons of drought or universal scarcity, has still been dependent to some extent upon those countries for its supplies.[‡]

---

[*] The first wheat was introduced into the country by a Spanish lady of Trujillo, who took great pains to disseminate it among the colonists, of which the Government, to its credit, was not unmindful. Her name was Maria de Escobar. History, which is so much occupied with celebrating the scourges of humanity, should take pleasure in commemorating one of its real benefactors.—(Prescott's History of the Conquest of Peru, vol. 1, note on page 142.)

[†] The sheep and goats from which the country was first stocked were introduced by way of Peru. This was accomplished by Domingo Martinez de Irala, the governor of Paraguay, in the year 1550. The Inca Garcilaso says that in 1556 he saw sold in Cusco sheep at $50 and $60, gold, each. In 1569 they had increased so that they were worth but $4. Goats that in 1554 were worth as high as $140 each had at the end of the century multiplied so much that no one took notice of them.—(See Garcilaso, Royal Commentaries, b. 9, chap. 8.)

The chronicler Zarate makes mention that when the Viceroy Blanco Nunez prepared to attack the rebel Gonzalez Pizarro he paid 12,000 gold dollars for 35 mules. This was in 1549.—(See Dominguez's Historia de la República Argentina.)

In regard to horned cattle it is stated that the original stock, consisting of eight cows and one bull, were brought by two Portugese brothers, Goes, from St. Catherine's, Brazil, to Paraguay; yet as early as 1590 we are informed that horned cattle in Peru were worth only $5 a head, and their introduction from that source would have seemed most natural. When D. Juan de Garay came down from Asuncion to reestablish the colony of Buenos Ayres (1558) he brought with him the cattle which have since spread over the Argentine pampas and developed into twenty millions, though their propagation was greatly assisted subsequently by Governor Ortiz de Zarate, who, in 1566, brought from Charcas 4,000 cows, ewes, mares, and goats.

[‡] In regard to this exclusive policy, which prevented all trade except with the mother country, and which so seriously retarded the development of the South American colonies, it appears that all the Spanish possessions were claimed as fiefs of the Crown. In its name a ministry or tribunal resident at the court exercised supreme government under the title of Council of the Indes; and the commerce of the colony was held by a company of merchants which was called the Contract House of Seville, in which place it held its seat and enjoyed the monopoly of the commerce of the New World. All commercial transactions were made through this contract house or by private parties who held special licenses, paying to the king a certain portion of their gains. Nothing was allowed to be exported from the country but gold and other

It is hardly necessary to say that in some of the upper provinces, even at the present day, the most primitive methods yet exist for the operations of agriculture. When I visited that portion of the country only a short time ago, I was surprised to see that the fields were prepared for planting with plows made of wood; that the wheat was cut with knives or sickles, and that it was threshed out by means of a drove of horses driven over the sheaves spread out on the ground inside of a *corral*. It is not surprising that a great part of the harvest was lost through this manner of gathering and threshing the grain. Yet this had been the method practiced by their fathers since time immemorial; and though they probably were fully aware of the fact that the inventive genius of man had discovered more suitable agricultural appliances, yet they were perfectly content with what they had.

AGRICULTURE AFTER THE SEPARATION FROM SPAIN.

It will be seen from this historical episode that agriculture in the River Plate has not in the past been an occupation in which the Argentines very greatly interested themselves. It was easier and involved less manual labor (the *gaucho* has an abhorrence of all work which cannot be done on horseback) for them to make fortunes in herding cattle and corraling sheep, and leave their breadstuffs to be brought to them from other countries. And yet there was some excuse among the laboring classes for this. Agriculture is one of the arts of peace. It abhors "wars and rumors of wars." It flourishes best in those countries where "every man can sit under his own vine and fig tree with none to molest or make him afraid." This was something which until very recently the Argentine tiller of the soil was unable to do. The early history of the various provinces, after their political separation from Spain, is an enumeration of civil commotions and petty revolutions. There was no permanent government, but the administration of affairs in each one of them passed to the hands of the chief who could muster the largest body of armed retainers; and these levies or musterings of the "provincial guard," as the body of the people in each province was called, were made on the smallest pretenses, and without a moment's warning took men from the cultivation of their fields for one side or the other who were entirely ignorant of what they were to fight for.

In many cases their crops were taken by foraging parties, and no remuneration was made for them. The laboring classes under these circumstances, unwilling to sow where they were not permitted to reap the fruits of their toil, abandoned their fields altogether and trusted to the fortunes of war for their support. It is a fact that after their separation from the Spanish Crown, owing to the wars of the patriots among themselves, many of the provinces actually declined in population and wealth.* There was a state bordering on anarchy all over the country. While the cities which were the centers of law and order were struggling to establish a constitutional general government, the rural population, representing the *gaucho* or lawless element, was fighting to defeat

---

metals; but as the Argentine provinces of Buenos Ayres did not produce metals, no commerce whatever was permitted, and Buenos Ayres was appointed by the king to be the port which should guard the treasures of Peru from being smuggled. With the accession of Philip II, the first governor of Buenos Ayres was allowed to open the commerce of that port with those of Brazil; *and it is a singular commentary on the agricultural decay which ensued that the first exports from Buenos Ayres consisted of flour, the fruits of the labors of the Indians who had been conquered and reduced to slavery.*—(See Dominguez's History of the Argentine Republic.)

* Barbarie y Civilizacion, por D. F. Sarmiento, page 62.

such a consummation. There was not a city that did not feel the devastating effects of the contest. Buenos Ayres (province and city) was especially unfortunate. Here the *gaucho* dictator, Rosas, ruled from 1829 to 1850 with an iron tyranny and despotic cruelty that kept the people in a state of the most abject fear and terror, making agriculture impossible and the possession of cattle a political danger. And when finally his power was broken, it was not until 1859 that the fourteen Argentine provinces formally in general delegate convention ratified the constitution which now binds them together as a nation.

PROGRESS SINCE THE ESTABLISHMENT OF THE ARGENTINE REPUBLIC

Since then the national power has been more firmly established, and has occupied itself in building up and strengthening that republican influence and sentiment among the people, which is the basis of popular government. The country since then has had its vicissitudes of attempted revolution, but the national authority has become too strong for the malcontents; and a feeling of general security, which was never experienced before, is gradually taking possession of all portions of the republic. Railroads and telegraphs are binding together with common interests and common aspirations the people of the different provinces, and making those acquainted with each other who were formerly enemies and strangers. It is only since the last twenty years that the Argentine Republic, as such, has had a constitutional existence; and the work it has accomplished in laying the foundations of a stable government, and the progress it has made during that period in all the arts of peace (considering the material it has had to work with), may well challenge the admiration of the world. General Bartolomé Mitre, the hero of the decisive battle of Pavon, and the first President of the Argentine Republic, upon assuming the duties of his high office in 1862, seemed fully to understand that agriculture must be the basis, in great part, of the material prosperity and future progress of the country, and that the first need of the new nation was an active agricultural population to settle up the illimitable wastes of Argentine pampas. Through Dr. Guillermo Rawson, the chief of his cabinet and an American by descent, a memoir was presented to the national congress,* calling the attention of that body to these important questions and urging it to adopt measures to divide the abundance of cheap and fertile soil which the republic possesses and so make it accessible to the settler by its price and condition, thus giving the immigrant the perspective of an irrevocable property and easy acquisition, which is, after all, the most powerful attraction to induce him to settle in the country. The Paraguayan war, however, broke out a short time after, and deterred European emigration from seeking the River Plate in such numbers as was at first anticipated.

In 1868 Col. Domingo F. Sarmiento, who had for the previous six years been acting as Argentine minister plenipotentiary at Washington, and whose able and discriminating mind had carefully noted the sources and causes of the material development of the United States, was elected to succeed General Mitre in the presidency. Fully appreciating the dignity of labor from the early necessities and privations of his own family, he brought the whole of his official and personal influence at once to bear upon the adoption of methods to populate the country and to educate the people. Possessing the active, progressive spirit which characterizes our own institutions, his three great schemes were the establishment of the system of free public schools, the fostering of immigration from abroad, and the advancement of the agricultural interests of the nation. With the latter end in view, he inaugurated the National Exposition at Cordoba, the first of the kind which had ever been held in the republic. He also conceived the idea of redeeming, for the purposes of agriculture, the islands of the delta of the Paraná River—islands whose beauty and whose harvests of fruits are now the marvel of all who visit them. But there lingered in the opinion of the public a grave doubt as to the possibility of opening farms for the production of grain on the treeless pampas, and, with that practical turn of mind which has ever characterized all his public labors, he matured the plan of testing the matter by actual experiment; and he had the Government survey and lay out into small farms a large tract of wild pampa land in the very heart of the Province of Buenos Ayres.* These were disposed of to actual settlers who would devote their attention to agriculture, and especially the production of cereal crops. The whole country thereabout is now like an oasis in the desert. It has been literally made to "blossom like the rose." Chivilcoy to-day is one of the most charming spots in the Argentine Republic, displaying in all its environs a succession of highly cultivated farms (*chacras*), and a wealth of timber belts, all the work of patient planting, which forever puts to rest the idea that the pampas are only suitable for pastoral pursuits.

---

* "Memoria presentado al Congreso Nacional por Dr. Guillermo Rawson, Ministro del Interior de la República Argentina, 1863."

Dr. Nicolas Avellaneda, who succeeded to the presidency in 1874, manifested throughout his administration a thorough devotion to the internal advancement of the republic, and labored zealously in the same direction as his predecessor, increasing the number of immigration agents in Europe and suggesting amendments in the laws with reference to colonization and the sale of the public lands to settlers. Being a native of the rich agricultural province of Tucuman and a statesman who appreciates the value to the nation of this civilizing industry, he took special interest in all movements looking to its development, among other things visiting and inspecting the agricultural settlements in the province of Santa Fé, and encouraging those engaged in tilling the soil by his presence and by his valuable suggestions.

General Roca, the present incumbent in the presidential chair, has, since he commenced his official career, exhibited an equal anxiety to foster and strengthen these growing industries of the country; and he has already acted as *padrino* or godfather to two agricultural or industrial expositions, organized for the express purpose of displaying the manufactures of the Argentine people and the agricultural productions of the several provinces. Under his fostering influence and the assurance which his administration offers for the continuance of internal peace and quiet, a greatly increased interest is now being manifested for agricultural pursuits and the opening of new farms—the fact that with the gradually increasing development of the country the Argentine Republic has at least to some extent become an exporter of breadstuffs being an incentive to renewed efforts on the part of the people. The agricultural department, organized under President Sarmiento, has become a busy focus of the movement, collecting and diffusing information in regard to the cultivation of the soil, distributing seeds and useful plants to the different portions of the republic, and scattering broadcast among the people theoretical and practical treatises on agriculture. It is now engaged in preparing statistics to show the progress which has been made in this important department of national labor.

---

* In every form this far-seeing patriot has warred against the nomadic life of the cattle-grower, which was an insurmountable barrier to the improvement of the rural districts. After two years' discussion he succeeded in getting permission from the Government to survey and lay out small farms, in the North American mode, an extensive tract, which was in the possession of squatters; and these farms he sold cheaply, in part to the squatters themselves, and in part to the emigrants from other lands. He personally superintended the laying out of the squares with broad streets and planting them with trees, which grew as if by magic in the rich pampas land that feeds countless herds of cattle without any labor to the owners.

On the occasion of opening the railroad recently completed to Chivilcoy from Buenos Ayres, many persons accompanied the governor to witness the ceremony, and all were amazed beyond expression to see the spectacle. It was Chicago in the desert, as Colonel Sarmiento has expressed it. For the first time within the life of one man was a region in South America so transformed. * * * Where the industrial movement is most conspicuous at this railroad station the only square called for a living man bears the name of Sarmiento.—(Biographical sketch of Domingo F. Sarmiento, by Mrs. *Horace* Mann, 1868.)

PRESENT CONDITION OF AGRICULTURE IN THE PROVINCES.

The public will await the publication of these reports with considerable interest. Meanwhile, in the absence of official data, I can only give such general statements in regard to the actual condition of agriculture and agricultural pursuits in the republic, and the agricultural possibilities of the different provinces and their adaptability for particular crops, as is afforded by the limited sources of information at hand. These are meager enough, though the following *résumé** may not be uninteresting.

PROVINCE OF BUENOS AYRES.

This is the most important, the most populous, and the most developed of all the fourteen provinces or states comprising the Argentine Republic. Within the old Indian frontier it contained about 2,500 leagues of land, to say nothing of the vast territory attached to it lying in the neighborhood of Bahia Blanca on the south. But within the last few years the frontier has been greatly advanced, and it is supposed to contain now about 7,250 square leagues, though the total area is not definitely known. Until last year its principal city was Buenos Ayres, but that has now been ceded to the general government as a capital, and it is henceforth to be, like Washington, under the control of the national congress. The new provincial capital has been located at Ensenada, where, under the name of La Plata, an embryo city has been projected on paper. The province contains, however, a number of important towns, of which I may mention San Nicolas, Luján, Mercedes, Chivilcoy, Lobos, Chascorrius, Dolores, Las Flores, Azul, Tandil, Pergamino, Bragado, Bahia Blanca, &c., as also more than a hundred smaller villages.

The principal occupation of the inhabitants has heretofore been the raising of horses, horned cattle, and sheep, and the preparing the product for exportation, but considerable attention has lately been given to agriculture. In the immediate vicinity of Buenos Ayres and other large centers of population the land has become too valuable to be longer profitably used for pastoral purposes, and, as in these localities agricultural pursuits pay so much better to the acre, there is now a wide extent of most promising farms for leagues in all directions, north, south, and west of Buenos Ayres. Along the lines of the several railways, and wherever there are growing towns, the tendency to convert cattle and sheep *estancias* into farming lands is every day becoming more general, while the flocks and herds are being farther removed out towards the frontiers. It is only a short time ago that the province did not produce breadstuffs enough for its own consumption, but the surplus which now finds its way to a market in this city begins to constitute a large item in the freight traffic of the railways. Every year shows an increasing breath of land devoted to the growing of wheat and Indian corn, but the crops are not confined to these cereals. Barley, oats, lucerne (alfalfa), potatoes, beans, sweet potatoes, pease, hemp, vines, vegetables, and fruits of all kinds are raised without any extra labor and produce most abundantly.

---

*I am indebted to the reports of the agricultural department and of Mr. Richard Happ, formerly of the national statistical office, for much of this information.—E. L. B.

There seems to be no doubt that the low islands in the delta of the Paraná River, which are intersected in all directions by arroyos or small creeks, and flooded when the river is high, would make magnificent rice fields, but no effort has ever been made to try such a crop. Under President Sarmiento's intervention, a species of osier for basket making was several years ago introduced from Chili, and has spread over other picturesque islands like magic, and it is now the source of an important industry and considerable wealth.

PROVINCE OF SANTA FÉ.

This province, which adjoins that of Buenos Ayres on the north, extends in a narrow strip along the Paraná River and is bounded on the north by the territory of the Gran Chaco, an immense body of unsettled country extending to the confines of Bolivia on the west. The area of this province is stated to be 120,000 square kilometers. It contains but two important cities—Santa Fé, which is the capital, founded in 1527, and Rosario, which is the second commercial port in the republic and well known for its foreign commerce. This is the most important agricultural province of the nation, and a very large proportion of the European immigration finds a home there. While the southern portion is, like Buenos Ayres, an open pampa, the northern portion is covered with forests. Cattle-breeding was formerly the important industry; and while this is still the occupation of many of the native inhabitants, the great wealth of the province consists in the agricultural settlements, or "colonies" as they are called. These are becoming more and more prosperous, and every year a larger breadth of country, wrested from the *estancieros*, is broken up and put under tillage. Last year the number of acres under cultivation was stated to be about 2,000,000, but since then many new farms have been opened. All kinds of cereals, vegetables, and fruits not only do well, but in some cases produce two crops a year, thus furnishing a large surplus for export.

PROVINCE OF ENTRE RIOS.

Bounded on two sides by the two great rivers, Uruguay and Paraná, and ramified by innumerable water-courses, with rolling prairies of marvelous fertility and stretches of superb forests, this is probably better adapted for agricultural purposes than any other portion of the republic. In its soil all the products of the temperate zone prosper magnificently, and the best results are sure to follow the labors of the husbandman; but, owing to the constant political disturbances, *emeutes*, and revolutions which have for years been the curse of this province, it as yet makes but an insignificant showing in an agricultural point of view. It has an area of about 115,000 square kilometers, and possesses a number of promising towns, viz: Concepcion del Uruguay, which is the capital; Concordia, Villa Colon, San José, Gualeguay, Gualeguay-Chei, Victoria, La Paz, Paraná, &c., all of which, being located on the rivers, have more or less commerce. The principal occupation of the people, however, is pastoral, and must continue to be until more confidence can be placed in the stability of the provincial government, which thus far, instead of inviting agricultural immigrants, had rather placed stumbling-blocks in their way. Ultimately, however, it will enjoy a better order of things, and then we may expect to see it the great grain-producing center of the republic.

PROVINCE OF CORRIENTES.

This province, lying to the north of Entre Rios, and also between the two great rivers of the country, is a continuation of the Argentine Mesopotamia. It is equally endowed by nature with a fertile and well-watered soil, and with a climate which is almost tropical it rivals Paraguay in the exuberance of its vegetation. Its area is about 125,000 square kilometers, mostly devoted to pastoral pursuits, in comparison with which agricultural interests are of but small consideration.

While no wheat is grown, it produces maize, or Indian corn, tobacco, cotton, peanuts, &c., but one of its most important crops is *mandeoca*, from the root of which a very highly esteemed article of bread is made. Fruit culture, especially that of the orange, is quite important, and the exports of this delicious fruit to Buenos Ayres and Montevideo amount to many thousands of dollars annually.

Its most important city is that of Corrientes, founded in 1588, which, besides being the capital, has a large commerce with the Republic of Paraguay and the territory of the Missiones.

Other considerable towns are Goya, Bella Vista, Empredado, Monte Caseros, Mercedes, Poso de los Libres, &c., but they are mostly inhabited by natives and half-breeds, who have no aptitude for the manual labor of agricultural pursuits.

PROVINCE OF CORDOBA.

This is the most important of the interior provinces, possessing an area of 217,000 square kilometers, and exhibiting a great diversity in the configuration of the soil.

On the south it is "pampa," and on the north and west begin the Sierras of Andes, in which are found inexhaustible mines of silver, copper, and other minerals. There is accordingly more diversity in the occupations of the inhabitants—not only cattle breeding but mining being favorite pursuits. Agriculture flourishes on the mountain slopes, which, being exposed to the sun and well watered, invite the cultivation of the vine on a large scale, while the valleys, owing to their constant climate, are admirably adapted to the raising of the silk-worm. The climate, however, is so dry that resort must be made to artificial irrigation; and this is yet accomplished in so rude and unsatisfactory a manner that agricultural pursuits, especially in the cultivation of cereals, are not attractive to the people. The capital of the province is the city of the same name, founded in 1573, and is the seat of the celebrated University of Cordoba, the second in age in either North or South America. There also is located the National Astronomical Observatory, under the charge of Dr. Gould, the distinguished *savant* of Harvard College. The province does not lack small towns and villages, in the immediate vicinity of which considerable wheat, Indian corn, lucern, &c., are raised, the latter crop being used for forage for fattening cattle. In no other province, perhaps, is this artificial cultivation required, the natural grasses, which grow spontaneously, being sufficient for such purpose the year round.

PROVINCE OF SANTIAGO DEL ESTERO.

This province has a superficial area of about 108,000 square kilometers; a large portion of it, however, is covered with salines, which are entirely unproductive. The capital and chief city is Santiago, founded in 1553; indeed it is about the only center of population in the province, much of which is still wild and unsettled. The principal occupation of the inhabitants is cattle-raising, agriculture having as yet scarcely a respectable foothold there. In the last few years, however, considerable attention has been paid to the cultivation of the sugar-cane, and I believe it promises good results. Very little wheat or Indian corn are produced, a good portion of the food of the inhabitants of the country departments being prepared from the fruit of the *algarroba* tree, which in different forms serves as nourishment for both man and beast. The province is somewhat isolated, and is at present anything but prosperous.

PROVINCE OF SAN LUIS.

This province, which lies west of that of Cordoba, has a small city of the same name for its capital. Its superficial area is 126,000 square kilometers, the greatest part of which is devoted to cattle-raising. Some little attention is also paid to the cultivation of lucern, for the purpose of fattening the cattle destined for export to the Pacific coast. The soil, however, is suitable for the cultivation of all the productions of the temperate zone, though much more attention is just now paid to mining pursuits, the adjacent sierras being rich in gold and other minerals.

PROVINCE OF MENDOZA.

This is the most westerly of the Argentine provinces, it being bounded on the west by the Cordilleras, which separate it from the Republic of Chili. It contains an area of 150,000 square kilometers, and its capital is Mendoza, founded in 1559, and destroyed by an earthquake in 1861. Considerable attention has, from time immemorial, been paid to agriculture, the want of rain being compensated for by the construction of aqueducts for artificial irrigation, which is provided by the innumerable streams which come down from the mountains. All productions of the temperate zone do well in this province, though, except for supplying the local consumption, the principal crop is lucern, which pasturage is in great demand for the cattle destined for the market of Chili. As all cattle on the way to Chili must be driven through Mendoza by the pass of the Uspallata, which is the easiest communication with the Pacific coast, and more than 50,000 horned cattle, without counting horses and mules, cross the province every year, it is evident that the amount of forage produced must be no inconsiderable item.

But the most important industry in Mendoza is its viticulture. The vine is cultivated expressly for the purpose of making wine; and the article is compared by *connoisseurs* to the best classes of Burgundy.

Large quantities of raisins are also prepared for market, as likewise figs, olives, &c. These industries are expected to assume greatly increased proportions, so soon as the Trans-Andine Railway, now in course of construction, shall give outlets to market, either by the Pacific or the Atlantic coast.

PROVINCE OF SAN JUAN.

This province, which has an area of about 100,000 square kilometers, and a capital of the same name founded in 1561, is situated to the north of Mendoza, which it very much resembles except that its mountainous features are more pronounced. Mining in gold and silver veins is its leading industry, though agriculture has always been a favorite occupation of the inhabitants, through a similar system of irrigation as that which prevails in Mendoza. All cereals and vegetable crops produce abundantly, though that of lucern occupies about one-half of the ground under cultivation. Excellent wine is likewise produced, as also large quantities of raisins, figs, &c. It has recently been reported that bituminous coal has been discovered in the province, though whether in working quantities remains to be seen.

PROVINCE OF RIOJA.

The area of this province is about 110,000 square kilometers, and it is famous for its mining industries; also for its cultivation of the vine, which it grows in large quantities, and from which it produces a most excellent and generous wine. Very little attention is paid to the production of cereal crops, not nearly so much as under the Spanish rule—only enough breadstuffs being raised to meet the local demand.

PROVINCE OF CATAMARCA.

Like the last-named province, the great industry of Catamarca is its mines. Its area is stated at 240,000 square kilometers, a large proportion of which is underlaid with rich ores of silver, copper, and iron, though there is a want of capital to exploit them, the province being too remote and too isolated to make it profitable at present. There is but a limited number of acres in cultivation, and hardly enough breadstuffs are produced to meet the requirements of the people.

PROVINCE OF TUCUMAN.

This province lies to the south and west of Catamarca, and owing to its natural beauties and innumerable farms, is called not inappropriately the "garden" of the Argentine Republic. Its superficial area does not exceed 70,000 square kilometers, a large portion of which is relatively well cultivated. There is but one city in the province, which has the same name and is the capital, its foundation dating back to 1565. Lying under the high ranges of the Andes, it has an excellent climate, well adapted to the production not only of the cereal crops of the temperate zone, but those of the subtropical regions. The fine pasturage on the mountain spurs feed immense herds of horned cattle, and there are numerous dairy farms, where is produced the celebrated cheese called Tafé, so popular among the native population.

Considerable attention is paid to the tanning of hides, the distillation of rum, and the planting of rice, tobacco, and latterly, of coffee; but the great and important industry of the people has, of late years, been the growing of sugar-cane, the breadth of land put down in this crop gradually increasing every year. A number of sugar establishments with the most approved machinery from England and France are now in successful operation; and it is predicted that the province will soon be in a condition to supply the whole country with all the sugar it consumes.

PROVINCE OF SALTA.

This province is north of Tucuman, and on the west adjoins the Republic of Bolivia. It has but one center of population of any size, and that is its capital, bearing the same name as the province. While it is richly endowed by nature and has a benign climate, with abundant irrigation, the hand of man has as yet done but little towards the development of this portion of the republic.

While all cereal crops do well, the country seems especially adapted to the growing of coffee; and this will probably be its great industry, so soon as the province has an outlet to market through the extension of the Rosaria, Cordova and Tucuman Railroads, on the opening of the Vermijo River to navigation.

PROVINCE OF JUJUY.

Owing to its isolation and the sterility of its western portion, this province is the least populous and least capable of sustaining a population of any in the republic. Its surface which contains 90,000 square kilometers of area, is to a great extent a series of precipitous mountains, whose heights and abysses make it difficult of access, to say nothing of extensive cultivation. Jujuy, its capital, is but an inconsiderable place, founded in 1592; though in its immediate vicinity, as also that of Ledesma, another small city, there are numerous well-cared-for farms, the climate permitting the production of the crops of every zone.

THE GRAN CHACO—PATAGONIA AND MISSIONES.

These fourteen provinces compose pretty much all the inhabited portions of the Argentine Republic. The territories of the Gran Chaco, whose area is 5,400 square leagues; of the Missiones, whose area is 700 square leagues; and of the Patagonia, whose area is 8,000 square leagues, are all, to a great extent, mere howling wilderness, where the plow of the husbandman has not yet broken the primitive sod. Of course none of them has any agricultural development. Missiones was once the seat of the Jesuit power in South America, and portions of it were in a high state of agricultural prosperity, but upon their expulsion from the country, that region went back to a state of primeval desolation, where nothing now remains to tell of what once was but the overgrown ruins of inhabited towns, whose crumbling churches, built in the highest style of mediæval art, have come to be the solitary abode of wild animals. The Gran Chaco has never been explored, and its wealth of agricultural possibilities must remain a sealed book, which will be opened only in the fullness of time, when it shall be required for the needs of population. Patagonia, heretofore the most unpromising of all the early Spanish discoveries, at last begins to show some signs of vitality. Along the Atlantic coast several settlements have of late years been made, and the wheat which comes from Chuput, Carmen de Patagones, and the valley of the Rio Negro is already an earnest of what the near future is to develop; while the recent explorations of the unknown regions lying under the shadow of the Andes prove them to be made up of meadows and rich valleys, whose exuberant vegetation is capable of sustaining countless millions of cattle and sheep; and whose fertility, one of these days, will make of that portion of Patagonia the granary and garden spot of the Argentine Republic.

But all this will not happen in the life-time of the present generation. It will not happen until the population of the country, which now scarcely exceeds two and a half millions of souls, shall have increased, by the process of natural generation and by immigration from abroad, into ten or twenty times its present numbers. This may seem like a wild dream; but even I can remember when the great States of Illinois, Missouri, Iowa, Wisconsin, and Minnesota were the homes and hunting-grounds of wild Indian tribes; when Kansas and Nebraska were outlying deserts which it was thought could never be inhabited; and when all the golden coast of our Pacific States slept unconscious of the marvelous destiny which it has since achieved.

THE WANT OF POPULATION.

The great want of the Argentine Republic is population—*men*, producers, tillers of the soil. It has everything else in abundance. It has mineral resources whose extent and value cannot now be adequately estimated. It has agricultural possibilities which are exceeded by no country in the world. It has a climate which ranges from the sub-tropical to that of Northern Canada, and is capable of maturing every variety of cereal, crop, fruit, or vegetable which is known to the earth. All this country needs is *people* to come in and take possession of these abounding gifts of nature so valueless in their undeveloped state, and, touching them with the magic wand of intelligent labor, turn them into wealth.

IMMIGRATION OF EUROPEAN AGRICULTURISTS.

In this work, as I have said before, but little can be expected from the native inhabitants. They are not by nature an agricultural people.

The Spanish race, whatever have been its conquests in the field of Mars, has never been celebrated for its achievements in that of Ceres. It does not take kindly to that kind of manual labor which extracts wealth out of the soil. For three hundred years the descendants of the Spanish conquerors have been satisfied with the easy, unlaborious life of watching flocks and herds, which, in the midst of the exuberance of wild pasturage, did not even require to be fed; and for three hundred more they would be satisfied with the same indolent occupation. For three hundred years they have neglected the greater riches which the teeming soil affords, and for three hundred years more, except they be quickened by the new life which comes to the country from abroad, they would continue this neglect. Fortunately for the Argentine Republic, this new life is beginning to seek these shores and to stimulate the agricultural stagnation which has so long existed here, with its strong and vigorous blood. This immigration is from Europe, and of late years especially it has been composed of men who were not only not ashamed of work, but who knew how to work—of men who have brought their lares and penates with them, and have come not with the expectation of accumulating a sudden fortune and then retiring from the country, but with the intention of remaining here and making this their home and the home of their children. This stream is yet but a small one. It is, however, setting in with a steady, persistent current, and as the internal peace of the nation becomes more and more assured, it is certain to increase and develop. In 1857, the first year of the Argentine Republic under its present federal constitution, it was only 4,931; in 1876 it was 17,046; in 1877 it was 28,798; and for the year 1882, just closed, it was 41,700. Since the year 1857 the total number of European immigrants arriving in the Argentine Republic by sea amounts to 711,165, or about one-quarter of the present estimated population of the country, and of this number it is estimated that about three-fifths came from the ports of the Mediterranean, mostly from Italy. Until late years the greater portion of these newly-arrived immigrants preferred to remain in Buenos Ayres and other cities and ports, devoting themselves to the commerce and navigation of the rivers, and to-day nearly all the coasting trade and lighterage is in the hands of Italians. Others engaged in handicraft and mechanical pursuits, and to-day they have the control of almost all the departments of skilled labor in the republic. But only a few of them thought of cultivating the soil. To a great extent this is now changed, nearly all the arrivals coming from the agricultural districts of Europe, and upon reaching these shores they have gone forth, laborious and courageous, into the Argentine wilderness to subdue and civilize it.

Already, where they have been properly settled in the different "colonies," they have achieved results which never entered into the imaginations of the native *gauchos*, who stood looking on incredulously. Of all these agricultural centers, the province of Santa Fé, as I have said before, shows the greatest advancement, though the *chacras* or small farms which are under cultivation in the province of Buenos Ayres are beginning to occupy a large breadth of land. Efforts are also being made to attract them to the province of Entre Rios, where several agricultural settlements have already been formed, and to the province of Corrientes and the territory of the Gran Chaco. For years to come, however, these far interior districts cannot expect to receive much of this immigration; or at least, not until they shall be unable to secure suitable farming lands in this and the adjoining provinces.

DRAWBACK TO AGRICULTURAL PROGRESS.

The great drawback to agriculture in this province (Buenos Ayres) has been that the land is in great part held in immense tracts by wealthy *estancieros*, who persistently devote it to pastoral purposes. Of late, however, there has been manifested a disposition, especially in the districts nearest to the large towns, to divide up these large estates into convenient farming lots; and, if not to sell, at least to rent them.

Such tracts, suitable for agricultural purposes, conveniently located along the lines of existing railways are, however, generally held at such *exorbitant* figures that but few of those seeking locations have the means to purchase; and of course it is not to their advantage to rent, break the land, and erect valuable improvements unless they can secure long leases, which it is not always easy to do.

The tendency, however, in all new countries is towards the dividing up of large estates; and it cannot be a great while before there will be a partition of the landed property of the country to a greater or less extent among the heirs of the present holders. It seems strange, meanwhile, that the Argentine Government, which knows the value of agricultural immigration, does not make provision for furnishing cheap farms to intending settlers. If this were done and liberal homestead and pre-emption laws were enacted by which all should be enabled to obtain public lands in convenient subdivisions and on easy terms, there would be more hope of speedily filling up the pampas with a thrifty population; but until such provision is made, it cannot be expected that there will be any such impetus to immigration to the Argentine Republic as we have seen running in the direction of the United States. President Roca lays the blame upon the national Congress. He has in his messages represented to that body the importance of making adequate surveys of the national domain with a view to its subdivision and sale or pre-emption, but no attention has yet been paid to his suggestions.

The propriety, however, of such action is so obvious that it cannot certainly be much longer neglected.

AMOUNT OF LAND IN CULTIVATION AT THE LAST CENSUS.

In regard to the amount of land now under actual cultivation in the Argentine Republic, it is impossible to give more than mere estimates. The last official returns were made in 1875, and though the figures were stated at the time to be too low, they will at least give some idea of what was the agricultural condition of the several provinces at that date:

Table showing the number of cuadras (*a*) *in cultivation in the Argentine Republic in* 1875.

Provinces.	Number of cuadras in Indian corn.	Number of cuadras in wheat.	Number of cuadras in alfalfa.	Number of cuadras in potatoes.	Number of cuadras in barley.	Number of cuadras in beans.	Number of cuadras in sweet potatoes.	Number of cuadras in vines.	Number of cuadras in sugar-cane.	Number of cuadras in tobacco.	Number of cuadras in pease.	Number of cuadras in peanuts.	Number of cuadras in mandioca.	Number of cuadras in cotton.	Number of cuadras in other crops.	Total number of cuadras in cultivation.
Buenos Ayres (*b*)	11,887	11,792	5,423	2,207	1,229	243	182	100	....	....	99	....	....	....	....	33,162
Santa Fé	9,815	21,259	4,450	797	152	563	388	....	....	45	81	58	....	....	....	37,608
Entre Rios (*c*)	3,300	3,030	....	939	290	124	165	8	....	20	51	30	30	....	....	7,987
Corrientes (*d*)	2,244	....	....	403	....	182	....	....	151	742	....	245	759	58	....	4,784
Cordoba	3,860	3,400	2,650	142	6	70	....	4	....	604	....	6	....	....	....	10,742
Santiago del Estero (*e*)	1,665	1,495	342	....	....	....	....	....	11	....	....	....	....	....	....	8,513
San Luis	4,550	1,740	3,595	14	98	36	....	58	....	3	....	....	....	....	....	10,104
Mendoza (*f*)	1,582	4,763	680	137	121	130	....	543	....	....	....	....	....	....	....	7,956
San Juan	2,021	6,525	26,205	32	157	193	....	1,216	....	120	....	15	....	64	110	36,658
La Rioja	2,550	2,707	750	....	73	150	....	3,005	....	....	....	....	....	5	....	9,240
Catamarca (*g*)	1,121	2,311	4,339	....	67	239	....	....	....	....	....	....	....	....	....	8,077
Tucuman (*h*)	9,846	6,945	1,727	37	902	49	....	....	1,212	474	83	73	....	....	1,736	23,084
Salta	7,077	1,062	1,672	154	44	62	....	181	172	17	12	6	20	....	....	10,499
Jujuy	821	830	540	129	211	51	8	1	315	13	....	6	25	5	4	2,959
Total	62,349	67,859	52,393	4,991	3,350	2,092	743	5,116	1,861	2,038	326	439	834	132	1,850	206,873

a A "cuadra" or square contains about four acres of land.

b The horticultural establishments surrounding the large cities are not included.

c The soil was cultivated in only four districts.

d The soil was cultivated in only twelve districts. The orange plantations are not included.

e The figures on sugar-cane were at the time known to be too low.

f The crop of alfalfa was too low, as this is the great pasturage of Mendoza.

g The extent of vineyards is not given, though considerable attention is paid to their cultivation.

h In this province there were 1,736 cuadras in use.

Reducing the figures of the above to acres, it appears that the total amount of land reported to be under cultivation in 1875 in the entire Argentine Republic was only 825,492 acres, of which 271,436 were in wheat, 249,396 in Indian corn, 209,572 in alfalfa, and the balance in other crops. As these returns, however, are known to have been very carelessly taken, it is not too much to add 20 per cent. to the above, which would give the whole amount of land devoted to crops in the republic at the date mentioned at about 1,000,000 of acres.

But this was nearly ten years ago. Since then, while there has probably been but little change in any of the far interior provinces except perhaps Mendoza, Tucuman, and Santiago del Estero, there has been a very notable increase in the number of acres which have been placed under cultivation in the provinces of Buenos Ayres and Santa Fé.

In Tucuman and Santiago del Estero, within the last few years, a large additional breadth of land has been planted in sugar-cane, but I am unable to give the figures.

THE AGRICULTURAL PROVINCE OF SANTA FÉ.

In regard to Santa Fé, the especial seat of the agricultural colonies,* the government of that province takes great pains to keep the public informed of their progress and condition. The following table embraces the statistics for the six years ending with 1881:

Condition of the Colony of Santa Fé in 1881.

Description.	1876.	1877.	1878.	1879.	1880.	1881.
Number of squares in cultivation	61, 800	78, 244	78, 244	104, 949	124, 205	162, 495
Number of squares in wheat	41, 223	59, 069	59, 069	73, 965	80, 012	108, 830
Number of squares in Indian corn	8, 751		10, 678	12, 593	18, 952	24, 276
Number of squares in flax					3, 628	4, 821
Number of squares in barley			8, 497	1, 467	3, 908	6, 483
Number of squares in peanuts				1, 884	3, 107	3, 653
Number of squares in other crops				15, 040	14, 598	13, 533
Number of feet of vines trellised	19, 702	19, 712	21, 246	45, 667	59, 343	72, 930
Number of fruit trees	1, 461, 899	1, 471, 899	1, 885, 546	2, 246, 947	2, 519, 750	2, 602, 579
Number of mulberry trees	31, 044	31, 044	49, 030	35, 108	46, 402	37, 940
The wheat crop, in fanegas	228, 727	228, 727	220, 845	336, 911	473, 591	494, 885

By reducing the squares in the above table into acres, it will be seen that in 1881 the total breadth of land under cultivation in the province of Santa Fé was 649,980 acres, of which 435,320 were in wheat, 97,104 in Indian corn, and the balance in other crops; while the wheat crop was 494,885 fanegas,† or about 3,093,031 English bushels, an average of about 7 bushels to the acre—owing to drought, the yield being short.

Comparing the breadth of land under cultivation in the province of Santa Fé in 1875 with that under cultivation in 1881, it will be seen that there has been an increase of about 500,000 acres in six years, with a corresponding increase in all the appliances of agriculture. The following table, also compiled from official statistics, shows the assessed value of the properties pertaining to the Santa Fé colonies for the year 1881:

---

*This is the term applied by the Argentine Government to the agriculture settlements or centers, peopled principally by foreigners.

†A fanega is 3.8936 bushels, or 137.20 liters; but in the province of Santa Fé it is equal to 15 arrobas of 25 pounds, or about 6¼ bushels.

SANTA FÉ AGRICULTURAL COLONIES.

	Value.
Farming lands	$7,683,639
Fencing and corrals	1,738,615
Houses	4,992,560
Work oxen	1,267,004
Work horses	655,608
Mules	31,868
Cows	4,921,099
Mares	349,397
Sheep	244,364
Hogs	161,470
Thrashing machines with steam power	341,050
Thrashing machines with horse power	19,550
Steam flour mills	1,497,500
Horse flour mills	46,900
Reaping machines	1,167,785
Spring carts	130,640
Four-wheeled wagons	916,665
Other vehicles	158,704
Other agricultural implements	623,636
Total	26,948,054

The above figures show a very gratifying progress, and cannot be regarded otherwise than as most satisfactory.

AGRICULTURE IN THE PROVINCE OF BUENOS AYRES.

In regard to the province of Buenos Ayres, in which since 1875 there has also been great agricultural development, I am not so fortunate in obtaining statistics. I lately addressed a note to the provincial statistical office, asking information as to the number of acres in cultivation and the breadth of land planted in different crops, but the director was not able to give me a single figure on the subject. As a census of the province was taken last year, I supposed the information I requested would be readily accessible, but it seems not; and I shall have to wait until the census is published, which will probably be some time during the present year. I can only meanwhile make a rough estimate of the present condition of agriculture in this province, and assume, if there were 33,000 squares in cultivation in 1875, and the industry here has kept equal pace with the development in the adjoining province of Santa Fé, that the number of squares under cultivation in 1881 would be about 115,000, or say 460,000 acres. These figures correspond very nearly with calculations made by persons engaged in the grain trade, who, as the season was a good one, estimated the yield of wheat for 1881 in this province at 3,000,000, or an average of 12 bushels to the acre on 250,000 acres planted in that grain.

BREADTH OF LAND IN CULTIVATION IN 1881.

So that on the basis of the above calculations for the provinces of Buenos Ayres and Santa Fé, and assuming that in the other twelve interior provinces there was no greater breadth of land planted than in 1875 (which is probably considerably understating the fact), the following table will approximately show the agricultural condition of the Argentine Republic in 1881, to wit:

Provinces.	In cultivation.	In wheat.	Average yield per acre.	Wheat crop.
	Acres.	*Acres.*	*Bushels.*	*Bushels.*
Santa Fé	649, 980	435, 321	* 7¼	3, 093, 031
Buenos Ayres	460, 000	250, 000	12	3, 000, 000
The other twelve provinces	542, 412	132, 204	7	825, 428
Total	1, 652, 392	817, 525	8¾	6, 918, 459

* Nearly.

That is to say, in the fourteen provinces of the Argentine Republic, with an area of about 2,000,000 square kilometers—say 800,000,000 acres—there was under cultivation in 1881 only 1,652,392 acres, all the rest being more or less devoted to grazing purposes. The showing is a very small one, but compared with that of 1875, it will be seen that the number of acres of land devoted to agriculture has more than doubled in the short space of six years.

AVERAGE YIELD OF CEREALS.

In regard to the average yield to the acre which is assumed in the above table, it is proper to state that it is not the true average, but the years mentioned were exceptional in that the crops were very seriously injured either by reason of continued drought or by the ravages of locusts. In good years the average yield of wheat in the province of Santa Fé is about 1,800 kilograms per cuadra (16 bushels per acre), and in the province of Buenos Ayres it is 2,500 kilograms per cuadra (23 bushels per acre), or about double the production of 1881. Owing to the causes mentioned, the crop has not hitherto been considered as a certain one, the hopes of the husbandman frequently being blasted by the advent of an army of devouring locusts when his fields were almost ready for the harvest, or earlier in the season a drought has set in and burned up the first promises of a crop. Good care and attention, improved methods or times of planting, and above that Providence which not only overrules but "gives the earlier and the latter rains," may in time remedy these drawbacks to the prosecution of this industry.

TABLE SHOWING THE STEADY PROGRESS OF AGRICULTURE.

Notwithstanding the vicissitudes of agriculture in the Argentine Republic, owing to good or bad seasons, the steady progress which the production of cereal crops is making in this country, in spite of all drawbacks, will be seen from the following table of imports and exports, which, beginning with the year 1870, I have carefully compiled from official sources. These figures tell the history of the agricultural movement in the Argentine Republic during the last twelve years better than any words I could make use of. The quantities are stated in kilograms, the Argentine Republic having adopted the metrical system for custom-house purposes, so that to reduce them to English pounds it will be necessary to multiply by 2.2:

Years.	Import of breadstuffs, &c.			
	Wheat.	Flour.	Potatoes	Indian corn.
1870	3,903,441	5,726,447	358,336	?
1871	1,524,129	5,681,057	527,122	?
1872	1,424,972	2,140,602	107,096	?
1873	1.054,705	1,017,461	?	?
1874	2,550,397	7,417,808	713,703	60,685
1875	4,847,451	16,922,739	....	60,675
1876	335,006	3,129,921	....	14,153
1877	600,190	127,711	....	....
1878	9,850	6,255	....	....
1879	6,408	3.725	....	....
1880 (*a*)	18,581,176	1,116,717	....	....
1881 (*a*)	11,478,470	1,142,898	....	....
1882 (*b*)	134,310	....	....	....

Years.	Export of breadstuffs, &c.						
	Wheat.	Flour.	Indian corn.	Potatoes.	Baled alfalfa.	Linseed.	Beans.
1870	....	....	....	....	....	....	....
1871	8,946	16,990	....	....	2,038,000	....	....
1872	17,361	205,778	....	....	4,190,000	....	....
1873	4,959	121,900	1,646,260	45,276	1,876,248	....	....
1874	357,502	24,379	3,862,439	43,487	2,241,363	....	....
1875	....	12,763	222,316	6,169	3,551,560	....	....
1876	20,868	353,441	8,058,369	3,234	3,996,393	....	....
1877	199,611	218,124	9,817,605	3,280	6,722,345	....	....
1878	2,547,438	2,918,887	17,064,044	151,181	5,337,564	....	63,476
1879	25,669,137	15,299,848	29,521,317	474,763	8,417,137	....	707,856
1880 (*a*)	1,665,628	1,423,386	15,032,015	277,805	9,221,319	....	141,394
1881 (*a*)	157,078	1,287,396	25,052,189	73,605	2,352,563	6,394,618	?
1882 (*b*)	245,445	46,000	88,353,665	?	536,604	18,644,472	67,625

a Owing to the locusts, there was a failure of the wheat crop in 1880, and a partial failure in 1881.
b These figures for 1882 only include the port of Buenos Ayres.

Leaving out of the count the years 1880 and 1881, in which, owing to the depredations of the locusts, the wheat crop was almost a failure, it is interesting to note the gradual but persistent reduction in the amount of imports, and the corresponding increase in the amount of exports of wheat and breadstuffs. The crop of 1879 shows from the export figure what a good harvest means to the republic. The year 1882, just closed, was not a good average in wheat, though in Indian corn the crop was the largest ever harvested in the country, the surplus for export being over 88,000,000 kilograms, or, at 56 pounds to the bushel, over 3,400,000 bushels (nearly 100,000 tons), from the port of Buenos Ayres alone, while linseed was also added to the list of exports.

PROSPECTS OF THE PRESENT HARVEST.

So much for the crops of former years. In regard to the harvest of the present year (1883), now in process of being secured, all reports coincide in saying that it will be a full average yield, not only in wheat, but in all other cereals, and from the breadth of land which has been planted it may be assumed that there will be an unprecedented surplus *for export*.

WHEAT.

From parties who have carefully studied the subject I have obtained a statement, which I give almost in their own words, of the amount of land put down in wheat:

	Acres.
In the province of Buenos Ayres, 120,000 squares	480,000
In the province of Santa Fé, 140,000 squares	560,000
Total in these two provinces	1,040,000

Now, assuming that the yield in the province of Buenos Ayres will be 18 bushels to the acre, and in the province of Santa Fé 16 bushels to the acre, we will have the following product:

	Bushels.
For the province of Buenos Ayres	8,640,000
For the province of Santa Fé	8,960,000
And, say, for the other provinces	2,000,000
Total yield of wheat, 1883	19,500,000

Assuming that the consumption in the Argentine Republic is four bushels to each inhabitant, and that the population is 2,500,000, there will be at least 10,000,000 of bushels in excess of the home demand for export, either in grain or in flour.

INDIAN CORN.

In regard to the crop of Indian corn, I have seen no estimate of the breadth of land which is now in cultivation; but it is believed to be nearly a third more than it was last year, and the yield will be a good one, so that it may be safely predicted that there will be a surplus for export of at least 5,000,000 bushels.

LINSEED.

For the last two or three years quite an interest has been manifested in the production of linseed for export. The yield of linseed is from 20 to 40 for one, and the country seems well adapted for its production. As we have seen, the amount of the export in 1881 was about 7,000 tons, while in 1882 it was over 21,500 tons. This does not include the fiber, which heretofore has been neglected; but the art of preparing it for use has been introduced into the country, and hereafter it is probable that hemp fiber will become also a valuable article of export. I may add that several oil mills have also recently been erected in the country for the coming year, and great hopes are entertained that the production of linseed oils will hereafter be added to the national industries. It is anticipated that the crop this year will largely exceed that of 1882.

OTHER CROPS.

The same may be said of the harvest of barley, oats, rye, potatoes, beans, some of these crops until now not having to any great extent been cultivated in the country. Barley especially, owing to the greatly increased demand for it in the manufacture of beer, has this year received more attention than ever before.

PEANUT PRODUCTION.

I would also refer to the growing of peanuts, which, especially in the province of Santa Fé, is a most prolific crop. There is a large demand, not only abroad but here in the country, for this crop, which is used in the manufacture of *olive oils*, as also, mixed with flour (half and half), in the production of a most excellent variety of bread. The amount raised during the last year in Santa Fé is stated to have been 300,000 arrobas, or nearly 150,000 bushels. This year it is estimated that the crop will be double that quantity. The amount exported to France last year was 114,792 kilograms.

THE GENERAL AGRICULTURAL OUTLOOK.

I have thus rapidly sketched the history of agriculture in the Argentine Republic from the beginning, and have, from such meager statistics I have been able to find, attempted to show its progress and its present condition. While, as I have said, the showing is not remarkable, either in the present breadth of land in cultivation, or in the amount of the crops, it at least indicates a steady forward movement, while the impetus that terra culture is now receiving from European immigrants promises much more for the future. The great point thus far gained, however, is the positive fact that the pampas of the republic are, in every essential, all that could be desired for the production of grain crops.

Henceforth, in my opinion, the agricultural development of the country is perfectly assured. The amount at present produced in excess of the home demand may seem small and trivial; but, when we remember that only forty years ago, even the United States had in part to import its breadstuffs, and consider the marvelous advance we have made in the production of grain crops since that time, we may to some extent appreciate the prophecy that it will not be many years before the Argentine Republic, which already has a yearly surplus for exportation, will be contesting with us for a division of the food supply for Europe. In beginning this report, I said that this event would probably not happen in the very near future. It may, however, be nearer at hand than some of us may imagine. For many years to come the leading industry of the Argentine Republic will probably continue to be the growing of cattle and sheep; but it is evident to my mind that the Argentine Republic is to have a grand future, as one of the great grain-producing countries of the world.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, January 23, 1883.

MEXICO INVITING IMMIGRATION.

REPORT BY MINISTER MORGAN.

I think I shall better comply with the wishes expressed in your dispatch No. 369, 15th February, 1883, by replying, as far as I am able to do so, to the questions propounded by Mr. W. B. Gibbs in his letter to the Hon. G. G. Dibrell, of the House of Representatives, which accompanied it.

1st. "Reliable information as to the desire of Mexico to have immigrants?"

Laws intended to attract immigration to the country were passed at least as far back as 1845.

The law of the 27th of November of that year, which was published on the 27th of November, 1846, provided for the appointment of a council of immigration to act under the supervision of the department for foreign affairs.

The law of the 4th December, 1846, attempted to regulate the duties of the immigration commissions, and to determine the rights and obligations of the immigrants. I believe that the effort of this legislation was not successful.

Within a comparatively recent date the attention of the Government has been again directed to the question, and, by means of contracts with private individuals and corporations, efforts are being made to supply what is considered the greatest need of the country.

I have not been able to procure a copy of all the contracts entered into upon this subject. Still I have seen a sufficient number of them to enable me to place before you a general view of the question and how it is being handled, and which will give to parties interested, or who propose to interest themselves in the matter, some basis upon which to form their operations.

1°. On the 31st August, 1881, a contract was entered into with Edmund Clay Wise, a citizen of the United States, and his associates, for the colonization of lands in the State of Chiapas.

The lands were to be such as might be acquired by the company, which he should form and represent, by contract, and "Terrenos Baldios." Of these lands I shall speak further on.

The nationality of the colonists is not prescribed in this contract. At least three hundred families and two hundred colonists are to be established within six years from the date thereof.

2°. One was entered into with the "Meridional Mexican Railway Company" on the 16th of January, 1881, for the colonization of lands situated along the line of that road, running through the States of Vera Cruz, Puebla, Oaxaca, and Chiapas. The nationality of the colonists is not alluded to in this contract.

3°. On the 21st of January, 1881, one was entered into with Robert R. Symon, a citizen of the United States, and his associates, for the colonization of "Terrenos Baldios" in the frontier State of Sonora.

The colonists are to be Europeans of the Latin race, and native-born Mexicans.

4°. On the 17th of January, 1882, one was entered into with the Mexican Colonization and Industrial Company for colonizing the islands of "Tiburon" and "Angel de la Guarda," in the Gulf of Cortez, Lower California, to which was afterwards added the island of "San Esteban," with one hundred families, of whom two-thirds are to be Europeans and one-third Mexicans.

5°. One was entered into on the 21st of February, 1882, with various parties (names not published) for the colonization of lands in the State of Morelos, district of Cuernavaca. Nationality of colonists not mentioned.

6°. One was entered into, on the 6th of June, 1882, with Rafael Portas Martinez, for colonizing lands in the States of Yucatan and Campeachy. The colonists are to be taken from the Canary Islands.

7°. On the 4th of December, 1882, one was entered into with General Jesus Alonzo Flores and Castielo Zenteno, for the cultivation of "Terrenos Baldios," in the State of Tamaulipas; nationality of the colonists not specified.

8°. On the 18th of December, 1882, one was entered into with Mr.

Daniel Levy, for the colonization of lands in the State of Vera Cruz, canton of Zangolia, with Europeans, Canary Islanders, and Egyptians.

9°. On the 6th of January, 1883, one was entered into with Daniel Levy, by which he was authorized to form a general colonization company, with a capital of $4,000,000. By this contract it is agreed that 5,000 families, to comprise 20,000 persons, are to be colonized; of these 80 per cent. are to be Europeans, the rest Mexicans.

10°. On the 10th of January, 1883, one was entered into with Mr. Isadore Epstein, for introducing into the country German agriculturists.

To this end he has agreed to go to Germany and Switzerland, there to lecture and publish pamphlets upon the advantages which Mexico offers to agriculturists.

11°. On the 17th of January, 1883, one was entered into with Salvador Malo, to establish a colonization agency, embracing Europe and the American continent.

The agency is to bring, within the term of ten years, from 20,000 to 50,000 European and American colonists, 75 per cent. of whom are to be Europeans.

12°. On the 26th of January, 1883, a contract was entered into with Louis Verdier, by which he was to go to Europe with the view of inducing Irish, German, and French to migrate to Mexico.

13°. On the 3d of April, 1883, one was entered into with Ramon Fernandez, with the view of colonizing lands in the State of San Luis Potosi. The nationality of the colonists is not stipulated.

Other contracts have been made; one, notably, with a Mr. Fulcheri.

I regret that I cannot give you any of the details of these, as they are the most important ones, seeing that they have been carried into effect.

One was also made with Mr. David Ferguson for the colonization of Lower California, but it has been declared forfeited.

I also understand that one was made with Mr. Samuel Brannon, an American, for the colonization of lands on the northern frontier.

I do not furnish you with a copy and translation of all these contracts.

I do, however, send you a copy and translation of one of them, which, theoretically at least, appears to me one of the most important, inasmuch as it gives, in detail, the obligations of the Government to the contractors; the obligations of the contractors to the Government and to the colonists; towards the contractors, and their status in the country.

It may not be uninteresting to you to have a general view of these respective obligations.

First, as to the obligations assumed by the Government towards the contractors.

In the "Wise" contract the Government agrees to pay $60 for each immigrant above the age of fourteen years, and $30 for those between three and fourteen. For each head of a family (husband and wife, with or without children) a bonus of $30; payment to be made one month after the arrival of the immigrants in the State of Chiapas.

The contract with the Meridional Railway Company provides for the payment of $35 for each immigrant landed, of upwards of seven years, and a bonus of $30 for each family when established; payment to be made one month after the arrival of the colonists in the States of Vera Cruz, Puebla, Oaxaca, and Chipias, or at the place where they are to be definitely located.

The Symon contract does not stipulate for the payment of any price for immigrants. A grant is made of 50,000 hectares of terrenos baldios in the immediate neighborhood of the Arizona mountains.

The contract with Andrade gives $35 for each immigrant above the age of seven years, to be paid one month after their arrival.

The Martinez contract allows $35 for each immigrant above the age of twelve years, and $15 each for those between three and twelve. To each head of a family shall be advanced, for the period of one year, $6 per month for each person of over twelve years of age, and $3 for those between three and twelve.

The property assigned by the company to the immigrants to be mortgaged by him in favor of the Government, to secure the advances made as above; these advances to be paid in ten equal installments, to commence two years after the immigrant has been established.

By the Flores-Zenteno contract, the Government is compromised to pay $60 for each immigrant above the age of fourteen years, and $30 each for those between three and fourteen years. In addition a premium of $30 to be given to each family when established. These payments are to made one month after the immigrants have been settled in Tamaulipas.

By the Levy contract the Government is to pay to the company $315,000 annually for thirty years.

Under the Malo contract the Government agrees to pay the company $700 for each head of a European family of agriculturists; $350 for each member of his family of seven years of age and upwards; $700 for each agriculturist; $500 for the head of each family of Mexican agriculturists; $250 for every Mexican family of seven years of age and upwards; $100 for each foreign laborer or mechanic; $50 for each member of a family of the above of seven years of age and upwards. For each one who comes out as an agriculturist, but who is not one, his passage and transportation. For each member of a family of the above of seven years of age and upwards, his passage and transportation. The same with those who come out and cannot agree with the company after their arrival. These payments are to made by the government within thirty years.

By the Verdier contract the Government agrees to pay $5,000 for his expenses; $30 for each immigrant of fourteen years of age and upwards, and $15 to those between six and fourteen.

By the Fernandez contract the Government is to pay for each immigrant above fourteen years of age $60, and $30 for those between three and fourteen; besides a bonus of $30 for each family located. The payment to be made one month after the colonists shall have arrived.

Assume that he will bring in one thousand. Say that one-half of them will be under fourteen years of age: For one 500 he will receive $30,000; for the second 500, $15,000. Say a family averages four persons; for each family he is entitled to $30; two hundred and fifty families, $7,500; total to be received in money, $52,500.

The Meridional contract calls for two thousand families. Assume a family to consist of four persons, the number of immigrants will be eight thousand. I may assume as a basis for the calculation that they will all be above the age of seven years, inasmuch as the families will average largely over four persons. For each immigrant, therefore, the Government will pay $35. Eight thousand immigrants, at $35=$280,000. Besides $30 to each head of family, of which there will be 2,000, $60,000; in all the Meridional contract, $340,000,

There is no money stipulation in the Symon contract.

In the Andrade contract the number of families is not limited. The number, however, cannot be less than one hundred; say two hundred families of four hundred immigrants. Four hundred immigrants, at $35 each, $14,000.

The Martinez contract calls for one thousand families, or four thousand immigants, at $35 each, $140,000.

In the Flores-Zenteno contract the number of immigrants is not limited. Assume that the number will be one thousand above the age of fourteen years. For these he is to receive $60 each; total, $60,000.

The Daniel Levy contract provides for the introduction of five thousand families, to amount to twenty thousand persons. The money obligation on the part of the Government to Mr. Levy is to pay him annually $315,000 during thirty years, or $9,450,000.

The Malo contract provides for the introduction of from twenty thousand to fifty thousand immigrants. For each head of a family of agriculturists he is to receive $700, and $350 for each member of his family above the age of seven years. For every farmer, $700. There are other gradations which it is not necessary for me to recapitulate here. Assume that Mr. Malo will bring into the country under this contract twenty thousand adults. The amount which he will receive will be $14,000,000.

The Verdier contract provides for the introduction of one hundred families, for which he is to receive about $3,000.

There is no limit fixed to the number of immigrants to be introduced under the Ramon Fernandez contract; suppose that he brings one thousand adults into the country, as he is entitled to $70 for each of these, he will receive $70,000.

The foregoing figures are, of course, in a great measure only approximative, but I believe that I have rather under than overstated them. They aggregate, as will be seen, about $24,000,000 of obligations which have been assumed by the Mexican Government, the two largest and altogether the most important of which are to be paid within thirty years. They make an average of over $800,000 per annum for that period.

Other obligations have been assumed by the Government in favor of the contractors, but they relate principally to assuring the possession of "terrenos baldios," which in my opinion are of little importance, for reasons which, when I come to the third of Mr. Gibb's questions, I shall develop.

In the Levy contract, however, this obligation is a serious one, inasmuch as the Government has agreed to sell to the company as much as eight hundred thousand hectares of "terrenos baldios," or other national property which has not been destined to the public service.

Obligations have also been imposed upon the contractors in favor of the immigrants whom they may introduce into the country. These obligations differ in the several contracts, and are matters of agreement.

I give you a synopsis of those contained in one of them, which will, I suppose, suffice.

In the Levy contract the company is obliged to erect for the use of each colony which it may establish, and without any compensation therefor, one forge, one carpenter's shop, a telegraph or telephone office with the furniture necessary thereto. It is obliged to furnish, and without any compensation, four lots of from four to five hundred square meters each, centrally located, for the erection of warehouses (*oficinas*).

It is obliged to establish, and to support for two years, two primary schools, one for boys and the other for girls, under the direction of Mexican professors.

It is obliged to give to each colonist of upwards of seven years of age four hectares of land in the table land (*tierra fria*) or three hectares in the lowlands (*tierra caliente*), and in no case shall a family of agriculturists receive less than twelve hectares on the table land or nine in the lowlands.

It is obliged to furnish each head of a family, on arrival at the colony, a good house, sufficient for the necessities of the family which is to inhabit it, erected on a lot of four hundred square meters, each house to consist of three apartments, one of which shall be at least twenty meters square and the others sixteen meters square.

Besides, the company is obliged to give to each head of a family of agriculturists one pair of oxen or mules, one cow, one mare or she mule, one hog, one she lamb, two pairs of fowls or doves, two plows, one of iron and the other of wood, with their accessories; one ax, one large knife (*machete*), one wooden mallet, one paring chisel, and sufficient seed for the two first plantings, suitable to the land to be cultivated, to the value of $20 each.

The obligations to the company are:

They are to pay for the lands which shall have been allotted to them, and for the animals, utensils, and per diem which they shall have received: each head of a family $700; each member of a foreign family above the age of 7 years $350.

Thus a family of four persons would pay for a house and lot and the animals and implements above named, together with about $300 advanced for their support and about 35 acres of land, $1,050. They have ten years to pay this in, dating from the second year of their possession.

The obligations of the company to the Government are:

The colonies are to be established within five years from the date of the contract. They are to bring no colonists into the country who have been sentenced to punishment for the commission of a crime; they are to be agriculturists and artisans.

The company are to deposit in the Monte de Piedad, six months after the signing of the contract, $50,000 to secure the performance thereof. These $50,000, as soon as the first colony shall have been established, is ceded to the Department of Fomento for the development of agriculture. Upon the referment of the $50,000 mentioned, the Government will reserve $100,000 out of the moneys to be paid to the company to secure the performance of the contract. They are to pay to the Government—

For each head of a family of foreigners	$350
For each member of a family of foreigners above the age of 7 years	175
For each head of a Mexican family	250
For each member of a Mexican family above the age of 7 years	125
Total	900

With these suggestions and the contract in view, any person interested in the question may form an approximate estimation of the advantages and disadvantages of the contract.

The status of the colonists is that they are Mexicans in the sense that whatever difficulties they may find themselves in are to be decided by the tribunals of the Republic and they are without any rights as foreigners.

2d. "How long does it require to become a naturalized citizen of Mexico?"

No time is specified by the law. Naturalization in Mexico takes place in several ways

1st. By the act of the President, upon application of the party, made before the judge of the place of his residence, from which it must appear that the applicant is a person of good character and has an honest mode of livelihood.

2d. When the son of a foreigner born in Mexico, and who has been emancipated during his minority, allows a year to pass after having attained the age of majority, without having declared his intention to retain the nationality of his father.

3d. When in the act of emancipation of the son of a foreigner it is not declared that he retains the nationality of his father.

4th. If he accepts a public employment which is reserved to Mexicans.

5th. Marrying a Mexican woman, coupled with the declaration of intention to establish himself in Mexico, with the qualities of a Mexican, which declaration must be made within one month from the celebration of the marriage if it took place within the Republic; within one year thereafter if it was celebrated outside of it.

6th. Coming into the country as a colonist under the protection of the laws which specially regulate colonization.

7th. When a foreigner purchases real estate in Mexico without reserving, at the time of purchase, his nationality.

8th. When a son is born to him in Mexico, of a Mexican woman, unless he reserves his nationality.

Naturalization confers upon the party naturalized all the rights and imposes upon him all the obligations which belong to and devolve upon Mexicans, except those which are especially reserved. For instance, naturalization does not entitle a person of foreign origin to become President of the Republic, a magistrate, attorney-general, governor in many of the States, public writer (notary public), &c. Neither can they enter upon public lands in the States or Territories adjoining the country of their birth or in which they were naturalized.

3d. "Are any inducements in the way of homesteads or land grants offered by the Government to actual settlers who become citizens; and if so, what"?

I believe the Mexican Government has no ascertained national domain.

I understand that an effort is now being made in that direction on the Pacific coast in the neighborhood of Acapulco, as well as on the northern frontier, but without any published result so far.

There is no national land office, and so the Government does not know what, if any, lands it possesses.

There is, however, supposed to be a great quantity of land known as "terrenos baldios."

The literal translation of this term is, I believe, "uncultivated lands." In law it signifies lands which have no known owners.

Article XXIV of the Constitution of 1847 recognized the existence of such lands, and authorized Congress to assume control over them and establish rules governing their occupation and the price at which they might be sold. Congress exercised this right by conferring upon the President of the Republic, for the time being, the power to regulate the matter. This successive Presidents have done. The first time by President Juarez, then by President Diaz, and last by President Gonzalez.

The price at which these lands may be acquired is fixed by the President every two years, and it is a notable fact that the prices fixed by President Gonzalez is less than those fixed by either of his predecessors, from which it may, I think, be assumed that the attempts of the Government to get them occupied has not been successful.

One great difficulty in the way is that the party who wishes to occupy these lands must first find them; when he thinks he has found them he denounces them to the judge within whose territorial jurisdiction they are. The judge then issues a proclamation, in the nature of a monition, calling upon all persons claiming title to them to appear and defend the rights within a certain time. The time elapsed and no one appearing to contest, the party denouncing them is ordered to be put in possession. But, as you are aware, the lands in this country have been largely granted, some of the grants extending, as I may say, from sunrise to sunset, and the difficulty is in finding good lands which have no owner.

In all of the contracts to which I have directed your attention the Government has conceded rights to these "terrenos baldios" and to other public lands, but the fact is, as I have before stated, the Government has no lands which it can dispose of.

The best evidence of which is that it was obliged to purchase those upon which the immigrants under the Fulcheri contract were located. And it is well to observe in this connection that whereas Americans may obtain permission from the Government to acquire lands within twenty leagues of the northern frontier, they cannot do so under the law in respect of the "terrenos baldios." I do not go into any further details upon this point, because I think that no man in his senses (no American at least), who wishes to establish a colony in Mexico, would go in search of these lands. He would naturally first become the undisputed owner of a property which he desired to colonize before he entered upon the speculation.

4th. "Are immigrants from the United States received without prejudice, or are they regarded with suspicion by the Government or by the people?"

I cannot answer this question authoritatively, for the reason that there is nothing that I can call an American immigration into the country.

There is a large investment of American capital here in railroads and in mines, but the number of our citizens who come here is small.

Those who do, come in search of employment on the railroads, or in the mines, or as clerks, and if I may judge by the number of those who apply to this legation and to the American benevolent association for assistance to enable them to return home I should say that coming to Mexico had not bettered their fortunes.

Doubtless this is due, in great measure at least, to a want of knowledge on their part of the language of the country; to a difference in the habits of the people here from those they have been reared amongst; to a difference in the methods of business, and to the fact that men fail here as they fail elsewhere.

Upon principle, I see no reason why the Government or people should feel suspicious of or be unfriendly to Americans who come to Mexico with the sole purpose of bettering their fortunes at the same time that they are assisting to develop the resources of the country, thereby adding to its wealth and increasing its population.

But this can only be ascertained, in so far as the Government is concerned, by actual experiment. The experiment would be primarily tested by some citizen of the United States proposing to make a contract similar in terms with one of those I have referred to. Its solution could only be obtained after the contract with the Government had been granted, and after Americans had been colonized thereunder.

I do not very well see how the Mexican Government could object to enter into such contract with an American in view of the contracts which it has made for obtaining a large immigration from other countries, for Mexico would, I should suppose, be slow to shut her doors in the face of Americans after having opened them so wide, and at such cost to herself, to other nationalities. Even should the application from any cause be refused (and I have no reason for saying that it would be), immigration of peaceful Americans into the country could not be legally denied. The refusal on the part of the Mexican Government to make a contract for American immigrants would only affect any subsidy which might be asked to assist in the colonization, for the laws of the country not only authorize but invite immigration, without respect to the nationality of the immigrants.

By the laws as they now exist, foreigners are permitted to purchase lands anywhere within the limits of the Republic except, in so far as Americans are concerned, they be situated twenty leagues from the boundary thereof. I do not see, therefore, what could prevent a citizen of the United States from purchasing a tract of land in the country within the limits prescribed by law and colonizing it with Americans, if he sees fit, and has the means to do so. Nor do I doubt that in such a case, if the settlers were attempted to be interfered with unlawfully, the Mexican Government would attempt at least to protect them in their rights.

It will not, however, have escaped your observation as regards the acts of the Government, that with two or three exceptions the contracts I have referred you to stipulate that the colonists from abroad are to come from countries other than the United States; and, as regards the views of the people upon the subject, it would not be at all surprising if they should prefer, for a time at least, to have immigrants come among them who are more akin to them in race than Americans are, and who, as a rule, are of the same religious faith as themselves.

It is quite impossible for me to state what steps have been taken by the parties in interest to carry out the greater number of the contracts to which I have referred you. Still less can I venture an opinion as to what they will result in. Neither can I express any opinion as to whether the Government is or will be in a condition to comply with the obligations it has assumed towards the contractors in case they should in good faith comply with what they have undertaken to do. This is a matter which, I suppose, the contractors have satisfied themselves about. Neither can I say what will be the result of the immigration to the immigrants. This, I think you will agree with me, is the most important question involved in the whole subject. If they should arrive here and find that the Government could not comply with its engagements to the contractors, or the contractors unwilling to comply with their engagements to them, they would be in a strange country without *means* and without friends.

The nearest approach to a practical solution of the present attempt on the part of the Government *and contractors* to colonize portions of the country with foreigners is to be found in the "Fulcheri contracts", to which I have referred you. These immigrants have been landed in the country, but with what success remains to be seen.

I have heard, and from what I consider the best authority, that one colony was entirely broken up by death and desertion, the mortality among them having been very great.

As I have had occasion to state before, when they arrived in the country the Government was obliged to, or at any rate it did, purchase lands upon which to locate them.

One colony was established in the low country. Some were sent near San Luis Potosi, others were colonized near Puebla.

Some are established near this city. Some statements are to the effect that they are now contented and prosperous.

Others, on the other hand, affirm that they are in a miserable condition.

From the fact that I have seen the Italian minister's premises crowded with them, some seeking employment and others asking to be sent home, I should think that there had been a great deal of dissatisfaction among them.

I inclose a letter which some of them published, which is descriptive of their condition as they see it.

I also inclose an article from the "Monitor Republicano" upon the general aspect of the question.

In considering the subject, however, it must not be forgotten that the present experiment has not been fairly tried; that the parties who originated it were without experience therein; that the immigrants themselves are far from being of the best class, and but little attention was paid in their selection with reference to the employment to which they were to be put on their arrival in the country; that they may have come with hopes held out to them which they could not have reasonably expected would be realized; that they are in a foreign land—a land different in almost every respect from the one whence they came, and that everything is new and strange to them. Such a condition of things would naturally engender disappointment and discouragement.

Is not this the usual experience of persons who immigrate in large bodies from their own country, lured to another by the hope of bettering their fortunes, and who listen perhaps with a too willing ear to the stories of apparently well-to-do speculators who have no interest in them beyond the sums which they are to receive for taking them to the country where they have contracted to take them, and whose interest in them ceases when they have received the price at which they contracted to deliver them.

It may not be out of place for me to remind you that several attempts have been made to effect American colonization in Mexico. If I remember aright one such was made some years ago in Lower California. The colonists had subsequently to be assisted back to the United States. After the war of secession a number of prominent citizens of the South came here. They settled near Cordoba. Those of them who did not die returned home.

5th. "At what price can large grants of land be obtained, suitable for colonization in the provinces of Sinaloa, Durango, or Chihuahua?"

There is little reliance to be placed upon theoretical answers to such questions, and I cannot answer them from my own observations, as I have never been in either of the states named, and practically I am far away from them—much farther than a person residing in New York is. Nor do I believe that any one could give such an answer to them as would justify action thereon.

I have been told that lands in that region can be purchased in large quantities at the rate of $1,000 for 1,000 square acres. But I do not pretend to say that my information is correct. I would not act upon it myself.

Sinaloa is said to be traversed by a number of rivers and innumerable brooks. There are some good streams in Durango, and Chihuahua is considered one of the best watered states in the federation. These states are said to be fertile and rich in minerals.

It must be borne in mind, however, that title to a tract of land does not confer absolute title to what is under the surface thereof.

Any person may denounce, and become the owner of any mine, no matter upon whose property it may be.

Neither must it be lost sight of that, while a title to lands may be easily procured, it is not always easy to procure possession thereof, for the purchaser might find them peopled with "squatters" whom it would be difficult for him to dispossess. I understand that such difficulties have presented themselves.

Under any circumstances, I should consider it the height of imprudence in any person to embark in any enterprise of colonization in this or any other country until he had visited it and seen it for himself.

6th. "Of the high plains and elevated plateau, what part is best watered and most fertile, and what diseases are most prevalent?"

This question, as you will observe, extends from Guatemala on the south to the Rio Bravo on the north, and is one which can only be answered by one who has traversed the country; and this I have never been able to do, as my official duties have kept me almost constantly at my post of duty. Only once have I been ten days away from the capital, and those ten days I spent at Orizaba, where I went at the advice of my physician. I have, however, been as far north as Lagos on the line of the Central Railroad.

All the valleys between these two points—and they are many and of considerable extent—appeared to me naturally fertile and susceptible of successful cultivation, and no country which I have ever seen appeared better adapted to the use of improved agricultural implements and labor-saving machines.

I have also been to Toluca. The same remarks apply to that section of the country. It all, however, seemed to require to be irrigated. But I must say that I am not an authority upon subjects of agriculture.

What diseases prevail I do not know, but I believe it to be exempt from epidemics.

I have not complied with the instructions contained in your dispatch of giving you "a succinct account of American immigration" to Mexico.

I fear you will think that I have written a volume where a few lines would have sufficed, but I have considered that it would not be uninteresting to you to be informed as to what is being done by the Mexican Government in respect of the question of immigration hither, and to make some suggestions which it may be well for our fellow-countrymen who are looking this way to consider before they embark upon such an enterprise.

P. H. MORGAN.

LEGATION OF THE UNITED STATES,
Mexico, April 25, 1883.

THE LEVY CONTRACT.

[Translation.]

Contract celebrated between General Carlos Pacheco, secretary of state for fomento, Colonization, industry, and commerce of the United States of Mexico, and Mr. Daniel Levy, for the establishing of a general colonization agency.

ARTICLE 1. Daniel Levy is authorized to form a company with a capital of $4,000,000, divided in forty thousand shares of $100 each, the only and exclusive object of said company being to establish in the country colonies composed of immigrants from foreign countries.

ART. 2. The company shall have been formed and the capital thereto subscribed for within eight months from the date of this contract, and the department of fomento shall be notified thereof, and shall be registered at this capital in the proper office.

ART. 3. The company will always have at this capital an agent duly authorized to treat with the Government upon every subject treated of in this contract.

ART. 4. At least 20 per cent. of the shares of the company shall be offered for sale in this city, to the effect that being covered by Mexican capital it would be a security that the investment would be a prudent one. Mr. Levy is authorized to dispose of these shares assigned to Mexico which shall not have been taken.

ART. 5. The company obligates itself to establish in the country, within the period of five years from the date of the present contract, five thousand families of colonists, numbering twenty thousand members of over seven years of age. Of these families 80 per cent. of the foreign families are to be brought from Europe, and 20 per cent. thereof shall be Mexicans.

ART. 6. On the total number of immigrants the company shall be entitled to bring 10 per cent. thereof in workmen or artisans. The balance must be exclusively agriculturists.

ART. 7. The lands upon which the colonists shall be located are to be well adapted to agriculture, and shall be situated not more than 50 kilometers distant from a railroad now or to be established.

ART. 8. The company, with the approbation of the department of fomento, shall establish the colonists provided for by this contract in at least ten of the States of the Republic. Twenty colonies, at least, are to be established.

ART. 9. Each colony shall consist of not less than fifty nor more than one hundred foreign families. Nevertheless, if it be the interest of the company to form a center composed of a larger number, say one thousand families, permission to do so may be asked of the department of fomento, which permission may be granted or refused as that department may see best.

The company will give to the Mexican colonists, who may be designated by the department of fomento or admitted by the company, in the proportion of 20 per cent. of the amount given to foreigners.

ART. 10. The company agrees to furnish, and without any compensation therefor, in each colony which it establishes, the necessary materials for erecting one forge, a carpenter shop, and a telegraph or telephone office, as well as the necessary furniture for the same.

ART. 11. The company shall also furnish, and without compensation therefor, in each colony which it may establish, four lots of ground of from 400 to 500 square meters each in the most central position, for the erecting of offices.

ART. 12. The company obligates itself to establish in each of its colonies, and to support the same for two years from the establishing of the same, two primary schools, one for males and the other for females, both of which shall be under the direction of Mexican professors, graduates of the capital or one of the States.

ART. 13. The company agrees to present to the department of fomento the proper certificates showing that none of the colonists which it brings from foreign countries has been sentenced for a criminal offense, accompanying said documents with a list containing the names of the colonists whom it brings into the country, which are to be deposited in the proper office.

ART. 14. All the expenses of transportation, disembarkment, traveling expenses, and maintenance of the colonists to the point of destination, as well as of their effects, shall be paid by the company, with the privilege, should it be to its interest to do so, to pay for the colonists to the Transatlantic Mexican Line $3 for the passage of each colonist, besides the $25 as stipulated in Article No. 27 of the contract of said line.

ART. 15. On the railroad lines upon which the Government has a right of rebate on the transportation of colonists and their luggage, the company shall enjoy the same right by such orders from the department of fomento as it may deem proper to issue upon the application to that effect by the company.

ART. 16. The company agrees to give to each Mexican or foreign colonist of seven years of age and upward four hectares, if located in the cold country (*tierra fria*), or three hectares if located in the hot country (*tierra caliente*). In no case, however, shall a family of agriculturists receive less than twelve hectares in the cold country, or nine in the hot country.

ART. 17. The company agrees to furnish each head of a family, Mexican or foreign, on their arrival at the point where they are to be located, a house in good repair, and of sufficient capacity for the family which are to occupy it, built in an inclosure of 400 square meters, the company seeing to it that it be constructed in the best manner, as well as that the town which they establish shall be laid out in straight lines. Each house shall be composed of three pieces, one of which shall be at least 20 square meters in size, and the others of at least 16 meters square each.

ART. 18. The company agrees to give each head of a family of agriculturists, besides the ground, house, and its inclosure, mentioned in the preceding article, one pair of oxen or mules, one cow, one mare or mule, one hog, one lamb, two pairs of chickens or doves, two plows, one of iron and the other of wood, with their accessories, one ox, one large knife (machete), one wooden mallet, one chisel, and seed sufficient for the first plantings, according to the cultivation to which the land where the colonists are located is subjected. The seeds for the first and second plantings shall be of the value of $20.

ART. 19. Besides this the company agrees to give to each colonist, Mexican or foreign, above seven years of age, a daily subsidy of twenty-five cents during the period of one year from the date of their arrival at the colony, and one canvas bed when they are established in the hot country, and a bed with one mattress to those who are established in the cold country.

ART. 20. The company will be allowed to introduce into the country, free of duty, everything which may be necessary for the construction of the houses as well as the implements, animals, and seeds necessary for the use of the colonists according to this contract. The department of fomento and hacienda will establish the rules by which the company is to be governed in making these importations.

ART. 21. The Government engages to sell to the company as much as eight hundred thousand hectares of vacant and uncultivated land (*terrenos baldios*) or land belonging to the nation which are not destined to any public service, at the price fixed for (*terrenos baldios*), upon the application of the company, which lands shall be designated within the term of three years fixed from the date of this contract, with the obligation that two-thirds at least of such lands shall be devoted to the purpose of colonization according to the terms of this contract.

ART. 22. As soon as the Mexican transatlantic line of steamers shall be established, the company engages to transport on the steamers of that line at least sixty per cent. of the colonists who come from Europe, giving notice to the department of fomento six months in advance the exact number of colonists on each voyage, as well as the name of the port at which they are to disembark. The proper department will at the same time be notified of the voyages of the steamers carrying colonists.

ART.23. The company will transport the families of colonists, proportionally, in the five years agreed upon, so that the Government will be guaranteed the annuities which it gives, as follows: The company must in the first year establish three hundred and fifty families; in the second, seven hundred; in the third, one thousand and fifty; in the fourth, one thousand four hundred; and the balance in the fifth year to the completion of the five thousand, the company being permitted to transport a greater number each year, to the completion of the five thousand.

ART. 24. On the voyages in which the company, without previous notice, does not transport colonists by the Mexican Transatlantic Line or transports a smaller number than it has contracted to advise the department of fomento of, in conformity with section No. 22 of this contract, the company will pay to said line $25 for each passenger which it should have shipped, less than 10 per cent. which shall be paid to the Government.

ART. 25. The colonists brought by the company shall enjoy all the privileges accorded to them by the colonization laws now in force.

ART. 26. The department of fomento shall always have the right to visit the colonies with a view of ascertaining the progress they are making, and the order and state of morality observed therein.

ART. 27. The company shall twice a year make a report to the department of fomento of the condition and progress of each colony, and the improvements introduced therein.

ART. 28. The first colony is to be established, at the latest, within eighteen months from the date of this contract.

ART. 29. This colonists shall pay to the company in reimbursement of the daily sums given to them, including the value of the house, lands, animals, and implements previously received by them, the sums following:

Each head of a foreign family	$700 00
Each member of a foreign family of seven years of age and above	350 00
Each head of a Mexican family	500 00
Each member of a Mexican family of seven years of age and above	250 00

These payments the colonists shall make in ten years, commencing from second year of their settlement in the colony, the payment to be made quarterly.

ART. 30. To carry out the preceding section the company is obliged to present to the colonists, before they engage themselves, the contracts which they must sign upon taking possession of their lands, houses, animals, and implements spoken of in this contract, which documents shall clearly express the rights and obligations of each *colonist, as well* as the form in which the houses and lands are to be distributed.

ART. 31. Difficulties which may arise between the colonists appertaining to questions of domestic or administrative economy are to be settled by the department of fomento. If these differences affect the fulfillment of the respective obligations of the company and the colonists arising under the stipulations of their respective contracts, and those of this contract, then they shall be determined by the proper tribunals, to the exclusion of every foreign intervention.

ART. 32. The company has the right to take back from the colonists who have not complied with their contracts the lands, houses, animals, and implements which have been allotted to them, which it may dispose of as it sees proper; it may also suspend the payment of twenty-five cents per day, taking care that this right is stipulated in the contracts.

ART. 33. If within the five years mentioned in this contract the company desires to introduce a greater number of colonists than that mentioned herein, the Government will not be bound to pay to the company any sum whatever therefor; but the company will be entitled to recover from such colonists, according to the stipulations of this contract, the proportion mentioned in article 29, the Government not being in any manner responsible to said colonists, except in virtue of a convention previously agreed to with them. Such colonists shall enjoy all the franchises which they are entitled under the laws of colonization now in force.

ART. 34. The Government agrees to pay to the company, in full satisfaction of all of its obligations thereto arising under this contract during thirty years, the sum of three hundred and fifteen thousand dollars per annum, desiring to have its accounts liquidated at the expiration of the 30th year.

ART. 35. The first installment is to be paid within the year in which the company is constituted. The installments succeeding are to be paid quarterly. These payments are to be made from the general treasury of the federation.

ART. 36. Should this contract lapse at any time between the first and fifth years (of its existence) by reason of the fact that the company has not established (in the country) the number of families which it has agreed to, it shall pay a fine of one hundred thousand dollars, to be deducted from the sums due by the Government, the liquidation being made proportionately to the annual installments of three hundred and fifteen thousand dollars, according to the number of families who have been colonized in conformity with the stipulations of this contract, which proportion shall serve as a basis for the installments which are subsequently to be paid by the Government to the company until the expiration of thirty years.

In this case the company will return to the Government the amounts specified in the following article, but only upon the basis of the colonists who have been established.

ART. 37. The company will pay to the Government, within the period of ten years, to date immediately following the location of each family, and in regular installments:

For each head of a family of foreigners	$350 00
For each member of a foreign family of seven years and upwards	175 00
For each head of a family of Mexicans	250 00
For each member of a Mexican family of seven years of age and upwards	125 00

ART. 38. The company shall deposit in the "National Monte de Piedad," within six months from the signing of this contract, the sum of fifty thousand dollars, which it will forfeit to the Government if the company is not organized within the eight months as stipulated in the second article hereof, or if organized, if it has not established the first colony thereunder within the term of eighteen months as stipulated in article 28.

ART. 39. The first colony established, the company shall cede to the department of fomento, in the interest and for the improvement of agriculture, the fifty thousand dollars referred to in the preceding article, to which effect the said department may at once dispose of.

ART. 40. When the deposit of fifty thousand dollars shall have been retired, the company shall deposit of the moneys which it is to receive from the Government one hundred thousand dollars, as a guarantee for the performance of its obligations under this contract.

ART. 41. To insure the payment which the company agrees to make to the Government for each colonist as is stipulated in article 37, it will at once exhibit to the Government the one hundred thousand dollars spoken of in the preceding article, as well as the property which it owns in the republic, and the credits which it has against the colonists. As soon as the Government is reimbursed the amount due to it by the company, the deposit shall be withdrawn.

ART. 42. Any difficulty which may arise between the Government and the company in respect of either of the clauses of this contract shall be submitted to the courts of the republic, the company or the colonists not being permitted to claim any of the rights of foreigners, even though the company be composed in whole or in part of foreigners.

ART. 43. The contract shall lapse—

I. If the deposit of fifty thousand dollars is not made within six months of the signing of the contract.

II. If the company should not be organized eight months after the signing of the same.

III. If the first colony is not established within eighteen months of the signing of the same.

IV. If four thousand foreign families, numbering sixteen thousand persons of over seven years of age, shall not have been settled in the country within five years from the date of the organization of the company.

V. Should a foreign Government be admitted as forming a member of the company.

VI. Should this contract be transferred to any company or individual without the permission of the Government.

ART. 44. An exception is made with regard to Nos. III and IV of the preceding article in case of superior force, properly proved and certified to the department of hacienda; the suspension however may last only while the impediment exists.

ART. 45. The lapse of the contract shall be declared by the Executive.

Transitory.—The costs of the stamps to this contract shall be borne equally between the departmett of hacienda and Mr. Daniel Levy.

Mexico, 6th January, 1883.

CARLOS PACHECO.
DANIEL LEVY.

COMPLAINTS OF ITALIAN COLONISTS.

[Inclosure 2 in Minister Morgan's report.]

MEXICO, *December* 27, 1882.

Honorable Editor of the Monitor Republicano, Mexico:

MY DEAR SIR: In the impartial columns of your journal, which defends with such dignity the interests of the unfortunate classes, we beg you will insert the following:

We, Italian colonists, inhabiting the colony of Chipita, State of Puebla, married and with children, were, without any cause whatever, and against the stipulations of the contract which we had made with this honorable Government, expelled from the colony and turned into the road without any resources whatever, and with our wives and children ill. Mr. Calderon, the barbarous and ignorant director of our colony, ordered us, with arms in his hands, to leave.

The disorders of this colony are revolting to the heart.

For reasons of decency, we avoid speaking of the lascivious and scandalous conduct of Mr. Calderon, who reigns over the colony as a pasha of the East. We only say that it is now six months that the colony has been idle, because he has only given to each family one hectare of land instead of six, which they should have received according to the contact above cited; that instead $25 per hectare, in conformity with the terms of the contract, he has made us pay $50 and $100, according to the class of land; that after six months' residence, we have as yet received no house to live in, nor implements or the necessary animals for the cultivation of our lands.

Finally, we have to say that we have been lodged in barracks like beasts of burden, instead of in houses. And this only for our colony. If we permitted ourselves to speak of the other colonies where we have members of our families and friends, we could say worse.

All this is the result of the great expenses which this Government has undergone for the purpose of establishing colonies.

Covetousness of large gain on the part of those who are in high positions; fellow-feeling among the employés, who are sacrificing hundreds of families and despoiling the national treasury; the contractors—merchants of human flesh—sit at the banquet like hyenas in the holy field devouring what is left of the abundance.

In these last few days the famous Accini from Genoa made us a visit, and with a sardonic smile on his lips, indifferent to our sufferings, told us that he was a party to a contract made by the Government to tear away 25,000 Italian families from their homes to sacrifice them in this country. He moreover told us that he did not bother himself about honor or glory, but only for gold, for which he was more hungry than Dante's wolf:

> Che dopo il pasto ha pui fama di pria.

And it is supposed that this heinous traffic of the trade of the Italians in this republic will net to the said Accini a profit of $30,000, which, if it does not cause him to sweat, neither will it frighten his soul nor trouble his conscience.

Ye iniquitous, who mock at the tears of your fellow-beings and who despise the indignation of God, your day will also come.

In thanking you for ourselves and all the colonies, we accompany our signatures to the above, attested to by the Italian consul of this city for the purpose of verifying the same. Copy of this letter we are also sending to the Italian press, to the end that they may show the treatment which has been received by the white slaves.

We are your obedient servants,

TERRARI QUINTO.
ZABBRO DANIELE.

Done in this royal consular agency, for the purpose of authenticating the persons who signed the present.

Puebla, December 21, 1882.

LUIS CANESI,
Italian Consul at Puebla.

COMPLAINTS OF ITALIAN COLONISTS—Continued.

[Inclosure 3 in No. 606. Article upon colonization.—Translation of an article from the Monitor Republicano of 30th March, 1883.]

Notwithstanding that we may be accused of being long-winded, we propose to occupy ourselves to-day with the question of colonization, on account of a species of denial which the Diario Oficial has made of certain sincere observations which we made to the department of Fomento with regard to the manner which certain colonies had been established.

We said that at the School of Agriculture a colony which was expected to arrive was to be established, and we indicated that, according to the information which we had received, the land upon which we were to establish our guests is unhealthy.

The Diario replied with some humor that, as it generally happens to the Monitor, we had been badly informed, and that, in point of fact, it was not a graveyard.

It may be that our information was not so far wrong, as we shall proceed to show to our worthy contemporary.

In point of fact, we did fall into a trifling error when we said, for example, that the colony which was expected to arrive was to be established on lands near the School of Agriculture. The truth is, that the colony is not to arrive, but was there at the time we wrote, and is composed of several families who inhabit a large warehouse on the hacienda of the "Ascencion," which, as is well known, is only a step from the school and belongs to it.

However this may be, this trifling error, we think, does not take away the force of our arguments, which had for their object the bringing to the knowledge of the department of Fomento the small consideration which its employés give to the establishing of the colonies.

We remember that according to the contracts entered into with the colonists they were to be given a certain quantity of land, agricultural implements, seed, &c., because the principal, nay, the sole end to which they were destined, was agriculture, which has not been the result with the colonists on the hacienda of the Ascencion; they appear to be in a sort of hospital and delivered over to idleness.

A friend informs us that a few months ago he made a short excursion in the neighborhood of San Jacinto, and that while there it occurred to him to visit the hacienda of the Ascencion, to which has been given the title of "Model Farm." After having traversed some rough roads and muddy places between Tacuba and the house on the hacienda, he reached it, and there he saw a number of Italians followed by their children, who appeared to be returning from labor, pass through a small door into a large inclosure. Impelled by curiosity, our friend followed the caravan, and, ascending a narrow stairway, he reached a sort of platform, erected on an immense gallery which was literally carpeted with mattresses made of corn shucks, attached one to the other on the floor or upon traveling boxes. In various directions women in the strange and bizarre costumes which distinguish the colonists, who wear stockings, were quietly conversing with men. From various directions, also, the visitor made the following observations, which we repeat as they were given to us:

In a narrow and ill-ventilated space were gathered together about fifty families, to whom had been promised land which the Goverment had purchased near the School of Agriculture, but which could not be distributed to them, as the greater part of the land was under water, owing to which the colonists had sought employment in the capital, at San Cosme, and Tacuba, either as domestics, or on the railroads, or in other occupations.

Speaking afterwards of the matter to a resident of Atzcapotzalco, he informed us that the land which the Government had purchased was in the immediate neighborhood of a ranch which was called the Shrimp, and that it was overflowed by the waters from the Sancopuia, the engineers of the School of Agriculture having been obliged to go into the water in order to survey it.

The department of Hacienda knows that engineers are of the opinion that it will be necessary to drain this land in order that it may be used by the colonists, and for these reasons our cotemporary, the Diario, will see that if we fell into a slight error when we said that the colonists were to arrive, there was no error in the essential portion of our assertion in respect of the inappropriateness of the ground for the colony which was to be established there.

Every day on the route to San Cosme are to be seen a multitude of Italian servants on their way to the plaza to make purchases, accompanying children to school; in fact, doing the work of the households in which they are employed. Lewd Italian women running in the evening towards the mariscala (barracks) would indicate that up to date the definite establishment of this colony, an enterprise located, we repeat, near the School of Agriculture, has not been accomplished.

It is not proper that these persons should receive a pension from the Government for doing nothing, and on this ground we urge upon the department of Hacienda, if it intends impulsively to follow the colonization current, to intrust the examination of the land (upon which it is to be located) to persons of intelligence, that everything may be in readiness for the colonists on their arrival. If, for example, the attempt at colonization is to be made in the neighborhood of Mexico, why not purchase the highlands north of the city, and avoid those to the west, which are almost always inundated, and which can only be drained at great expense.

We also said in the article which is attacked by the Diario that the colonists were to be lodged in wooden houses which had been ordered from abroad. The Monitor's information upon this point was not incorrect. The houses have reached here, and, if we are not mistaken, are now at the model farm.

We do not know whether at this date matters continue to be as we have described them. If they are, we do not consider it proper that the colonists remain permanently at the Ascencion in a sort of a hotel, leading an easy life, and receiving a pension from the Government for doing nothing. It is evident that they came to Mexico to work, to improve their condition and that of their families, and for this reason it is proper that they should be given the land which they are to cultivate.

We have thought proper to make these observations, as well for the purpose of showing to the Diario that the Monitor has not been misinformed, as to call the attention of the department of Fomento as to what is going on in the matter of colonization.

If here in Mexico, in the sight of every one, such proceedings are being carried on by the high employés of the colonization scheme, we may fancy what is occurring in places at such a distance that the eye of the press can with difficulty reach.

We do not disguise from ourselves that the department of Fomento has undertaken a work of great utility to the country, in giving an impulse to the agriculture of the country, in introducing amongst us the best and most productive methods of cultivation, in giving an impulse to our various mining interests. Colonization is a matter of the greatest possible importance to our country. It is, indeed, the foundation, we may say, of our prosperity. For this reason we should give to it our greatest consideration; and for the same reason we should at once remedy the defects which appear in the system lately adopted to attract colonists to our soil.

We repeat that we have no desire to discourage Señor Pacheco in the work which he has undertaken. We simply wish to frankly bring to his notice facts of which he is perhaps ignorant, in order that he may find a remedy for them.

The Diario Oficial states that the climate of Barreto was not suited to several of the colonists established there, from which it is natural to suppose that it disagreed with many of them. This is an indication that it is proper to take more care in the selection of the lands which are destined for colonists, to the end that there should be no repetition of the occurrences at Barreto, where it is natural to suppose the number of the colonists will continue to decrease from the effects of the unhealthiness of the climate.

THE SEYCHELLES ARCHIPELAGO.

REPORT BY CONSUL MUSSEY.

DESCRIPTION OF THE ISLANDS.

The Seychelles Archipelago lies in the Indian Ocean, about 1,400 miles southeast of Aden, and 1,000 miles east of the coast of Zanzibar, in latitude 4° south and longitude 55° east. The Seychelles group comprises about thirty rough, rocky, and mountainous islands, surrounded mainly by coral reefs. The group was discovered by the Portuguese in the fifteenth century, taken by the French in 1642, and captured from them in turn by the British in 1814, since which time they have been under the domination of Great Britain. The name is derived from a French explorer, Count Hérault de Seychelles, who visited the islands at an early period in their history.

The surface of the land is extremely rugged and mountainous, and but a comparatively small portion is available for agricultural purposes. Huge bowlders lie thickly strewn on the surface everywhere, and great labor and capital must be expended to clear the steep sides of the hills and mountains of stones, trees, and tropical tangle of grass, vines, and undergrowth.

The soil is a hard, red, clayey loam, strong in plant-food and the elements that make a vigorous vegetable growth, and, given the adjuncts of heat, moisture, and almost perpetual sunshine, vegetation flourishes and riots in tropical abundance and luxuriance. The islands are, therefore, green and fresh at all seasons, and particularly so during the wet period, which extends from November to May. During this season, the tropical summer, immense quantities of water fall, the total for the year 1881 amounting to 113.50 inches.

The climate is warm and equable, the extreme range of the thermometer in 1881 and 1882 being only 22°, viz, minimum 71°, maximum 93°, Fahrenheit. The heat is seldom sultry and oppressive, as the air is tempered by the monsoon, which gives a cool breeze rarely broken. The "winter" season covers the months between May and November, and the climate is most agreeable, as the southeast monsoon obtains, and the mercury but infrequently rises above 85°. These islands are too far to the north to receive the frightful hurricanes which occasionally sweep over the sister islands of Bourbon and Mauritius, and even thunder-storms but seldom appear here.

POPULATION.

The population of the Seychelles number only 14,081, of which amount about 500 are white, 11,500 black, and 2,000 Indians from the Malabar and Coromandel coasts of India. A majority of this population is returned by the census of 1881 as unemployed; a striking fact, as it shows the simple wants of the people, and, further, that those wants can be supplied without recourse to labor. The population is mainly composed of blacks from Mozambique and their descendants, who live in little huts made of the leaves of the cocoanut tree. The food of these people consists of rice, manioc, fruit, and fish, all of which are plentiful and cheap. Large families are the rule among the blacks, and men and women of exceptionally great age are frequently met. The islands are noted for their healthfulness, and in the reports of the National Board of Health it will be noticed that Seychelles has a very low death rate, the average for 1880 reaching only to 13.1 per thousand. This is owing to an equable climate and to an almost total exemption from fevers, endemic, epidemic, and contagious diseases. Leprosy prevails to some extent, the report of the Superintendent of Census for 1881 showing a total of 39 lepers. These figures, however, must not be taken as representing the total number, for leprosy is such a terrible disease that people conceal as far as possible the fact that they are leprous.

GOVERNMENT.

Seychelles is a dependency of Mauritius, and the local governing power is vested in a Board of Civil Commissioners, six in number, with Arthur C. S. Barkley, esq., as chief. These commissioners, three of whom are official, namely, the chief, the district judge, and the Government medical officer, and three unofficial members, citizens of Seychelles, serve on this Board without compensation. The function of the council consists of a law framing power directed to the general welfare of the islands, their government, their public works and schools, and the other administration departments of public economy, subject to and limited by the sanction and approval of the governor of Mauritius.

The duties and powers of the chief civil commissioner may be briefly outlined as follows, and they do not materially differ from the functions of the lieutenant-governor of other Crown colonies. He has—

1st. The power to stop prosecution before the case is entered at court.
2d. The right of pardon.
3d. The right to remit fines.
4th. The right to issue licenses of marriage in the case of minors, &c.
5th. The conferring of appointments.
6th. The right to administer oaths.
7th. The power to suspend officers.
8th. The power to issue warrants for the expenditure of public money.
9th. The right, in case of emergency and in the absence of special instructions, to take such a course and to resort to such measures as in his judgment will best tend to preserve and promote the welfare of the people.

LANGUAGE.

The French-Creole patois is spoken by a majority of the inhabitants, but English and French are taught in the schools, and form the medium of communication with the better classes. English is, of course, the language of the Government, and all official documents are in that language.

MONEY.

The financial unit is the rupee, of the commercial value of fifty cents, but of an intrinsic value of thirty-nine cents only. Formerly Government accounts were kept in dollars and cents, by reason of their simplicity, and the rupee passed as a half dollar, but an official order restored the rupee as the unit. The paper money bears the imprint of Mauritius, and appears in the denominations of five, ten, and fifty rupees. A large and varied assortment of gold, silver, and copper coins of the coinage of England, France, Portugal, India, China, Straits Settlements, Australia, and Mauritius are in circulation, and they are a source of great trouble, annoyance, and confusion, particularly to strangers.

RELIGION.

The Catholic religion has a strong hold on the feelings of a majority of the population, and it forms the dominant faith, as can be seen by the table which follows, the religious preference of the population of the island of Rodrigues, numbering 2,281, being incorporated with that of Seychelles:

Christians	35
Catholics	13,266
Deists	18
Free-thinkers	5
Hindoos	212
Mohammedans	43
Methodists	19
Presbyterians	1
Protestants	3,014
No preference	349
Total	16,962

A brotherhood of Capuchin priests, under the direction of the bishop and vicar-general of Seychelles, conduct the various churches and schools established and supported by the Catholic faith.

The Church of England is represented by a civil chaplain supported and paid by the state.

The sum of $4,375 appears in the approved estimates as expenditures for the current year in the support of religion.

EDUCATION.

Educational advantages in the Seychelles are of a low order, and it is quite impossible to obtain here anything better than a common-school education, and parents who would give their children thorough instruction are compelled to send them away for that purpose. The progress made here in an English colony in teaching the English language is slow and unsatisfactory, and the inspector of schools in his annual report for 1881 notes that fact and accounts for it on the ground that well-qualified and well-equipped teachers of English are extremely difficult to obtain, and that the amount of funds at the disposition of the managers of the schools is not equal to their wants and necessities. The chief civil commissioner, in referring to the teaching of English in the schools, says:

> The teaching of the English language in Seychelles schools is, however, a matter concerning which parents will probably ere long become as anxious as the Government itself can be, since the necessity for the acquirement of the language, in the case of all boys intended for commercial pursuits, or for the Government service, is becoming daily more apparent to all. Should a Government school be established, as I trust it shortly will be, no pains will be spared to secure an efficient teacher of English for it.

The total number of scholars, cost per head on average attendance of all the schools of Seychelles, and the number of teachers, are set forth in the following table:

Schools.	On roll.	Average attendance.	Number of teachers.	Cost per head.	Total cost.
Roman Catholic schools	704	613	17	$4.67	$2,778 50
Protestant schools	253	193	5	4.42	867 12
Total	957	804	22	....	3,645 62

IMPORTS AND REVENUES.

The imports of the Seychelles consist of general merchandise, and the exports of cocoanuts, cocoanut oil, vanilla, cacao, coffee, cloves, nutmegs, fruits, vacuo bags, &c. The table appended gives the amount of customs dues received during the year 1881:

Customs	$27,058 50
Licenses	8,448 50
Excise	6,841 50
Stamps	1,163 00
Taxes	11,863 50
Fines, forfeitures, and fees	6,315 00
Rent of Crown lands	513 00
Post-office	1,212 50
Miscellaneous	1,339 00
Total	64,754 50

The country is poor, money is scarce, and, owing to the shrinkage in the production of cocoanut oil, revenue has been diminished, business has been arrested, and stringency in the money market has followed. As a natural sequence some time must elapse before an equilibrium can be restored, and if the disease which now infests the cocoanut trees and is fast killing them off will awaken planters to the necessity of putting in a variety of crops instead of depending alone upon the product of the cocoanut tree for the support of themselves and their families, there is no reason why the revenue may not soon be swelled to its former proportions.

AGRICULTURE AND PRODUCTS.

Seychelles is favored with a climate admirably adapted to agricultural purposes; a soil strong and rich; and there appears no valid reason why its prosperity should be arrested, except by gross shiftlessness on the part of land-owners, and a temporary scarcity of money. The influx of new blood with capital would soon raise the exports to a higher figure, and with increased exports come augmented imports and a greater volume of money.

The crops which grow specially well in Seychelles are vanilla, cacao, cloves, coffee, nutmegs, oranges, and lemons. The first named grows with great vigor and produces abundantly, and one planter has sold $17,000 of vanilla in one year from a plantation of ten acres. This season considerable new ground will come into bearing, and the exports of vanilla from Seychelles hereafter will be an item of some importance. The price of Seychelles vanilla in the Paris market ranges from $6 to $8 per pound.

AMERICAN WHALERS.

This port a few years since was the rendezvous of the American whaling fleet in these waters, and the table annexed will show that either the vessels have taken to some other port or that the fleet has passed to some other ocean. These waters have been in the past undeniably overfished, and the vessels here in the years 1877, 1878, 1879, 1880, and 1881 have not been particularly lucky. Two American whalers were in this ocean in the early months of last year, but they were unsuccessful and soon put back to the Atlantic. Whales are numerous and are frequently seen, but with the exception of a British whaler now fishing here no great catches have been made within the last five years.

Years.	American vessels entered.	Average value of catch.
1872	7	$27,714
1873	7	31,714
1874	11	26,400
1875	11	38,360
1876	11	22,863
1877	16	15,125
1878	20	18,890
1879	7	15,285
1880	1	27,000
1881	1	9,000
1882	2	13,200

EVELYNE P. MUSSEY,
Consul.

UNITED STATES CONSULATE,
Mahé, Seychelles, February 5, 1883.

HYGIENIC EXHIBITION IN BERLIN.

REPORT BY MINISTER SARGENT.

In my No. 4 of May 13, 1882, written immediately after my arrival in Berlin, I announced to you the burning of the International Hygienic Exhibition in this city.

This exhibition was intended to display all kinds of apparatus and instruments for detecting disease and its causes, for investigation of the human body and for examining air, light, water, food, as well as to exhibit all kinds of food itself, the modes of its preparation, transportation, &c., all varieties of articles tending to the preservation or restoration of health, and to minister to the comfort and cure of invalids, from the ambulance to the surgeon's needle; and generally to display the results of sanitary science and the appliances of medical and surgical art.

The whole civilized world was interested in the success of such an undertaking, which could not fail to extend and popularize one of the most important branches of human knowledge, and give to the valuable profession most interested inestimable opportunities for comparison.

Unfortunately the treasures of this exhibition were confided to inflammable structures, and the buildings and contents were destroyed a few hours before they were to be opened to the public, to the universal regret not only of Germany but of the world. But little time was lost in repining.

The Empress had taken a warm interest in the undertaking from the start, and with the wisdom and goodness that have made her good works and charitable institutions a blessing to the suffering poor, she encouraged the rebuilding of the structure and the execution of the original plans. The Crown Prince has been her representative in the matter, and the useful work is again so far completed that the exhibition will be formally opened on the 12th instant by the Crown Prince in person.

A few days since, upon permission of the superintendent, I inspected the structures then nearly completed, into which many articles for exhibition were already placed. The buildings are now built of brick, iron, and glass, as they should have been originally, and seem indestructible. Admirable method seems to reign in all the arrangements. In one part of the building the visitor will see everything connected with instruction and gymnastics, clothing, school desks and forms, &c. In another part of the same wing room is devoted to all things destined for hygienic care, and food used for the subsistence of the poor, the prisoners, the sick, the sanitary arrangements for theaters, concert rooms, &c. A special place displays the requirements of the army in time of war; another has models of hospitals, dispensaries, arrangements to revive the drowned, asphyxiated, &c., field and ship hospitals, sanitary wagons, stretchers, &c.

The sanitary arrangements of everyday life enter largely into the exhibition. Little short of a catalogue could do justice to the subject, and a full presentation would seem to embrace the driest details. To avoid these I inclose an official catalogue, a work of 286 pages, with diagrams.

Although the fire destroyed some treasures that cannot be replaced, there is no doubt the exhibition will be a grand success.

Among the things destroyed, and which cannot be replaced, were old instruments, models, documents, old relics, books of old prescriptions, and curiosities.

It is pleasant to end my first year of service by announcing the rehabilitation of an enterprise the destruction of which marked its commencement.

A. A. SARGENT.

LEGATION OF THE UNITED STATES,
Berlin, May 7, 1883.

IMPORTATION OF WINES AT BORDEAUX.

REPORT BY CONSUL ROOSEVELT.

The customs statistics for the first three months of 1883, compared with the corresponding period of 1882, give the following figures for the importation of wines at Bordeaux:

Countries.	First quarter 1883.	First quarter 1882.
	Hectoliters.	*Hectoliters.*
Spain	227, 675	231, 538
Italy	47, 982	8, 727
Austria-Hungary	12, 000	6, 600
Other countries	115, 919	69, 502
Total	403, 576	316, 367

Increase, 87,209 hectoliters.

During 1882, owing to the high prices demanded, very little wine was brought from Italy. At present there is a decided increase in the importation of wines from that country.

Portugal, almost exclusively comprised under the title of "Other countries," furnishes a large per cent. of the wine imported, greatly to the disadvantage of Spain.

The importation of wines into France, and especially at Bordeaux, is steadily increasing. Bordeaux received during the first quarter of 1883 221,468 hectoliters of French wines less than in the corresponding quarter of 1882. This is a great diminution, and shows how poor the last vintage was in quantity.

GEO. W. ROOSEVELT,
Consul.

UNITED STATES CONSULATE,
Bordeaux, April 26, 1883.

THE NEW FISHERY BOARD OF SCOTLAND.

REPORT BY CONSUL LEONARD, OF LEITH.

The fishing industry of this country, which has been rapidly increasing in importance, and which attracted much interest on occasion of the International Fisheries Exhibition held at Edinburgh in April last, is now materially strengthened by a fishery board for Scotland, having been established by recent enactment of the British Parliament.

The new fishery board consists of the sheriffs of three sheriffdoms and six members appointed by the Queen.

By the three sheriffs and one of the lay members, each of the four principal centers of the herring fishery will have a voice in the Board's deliberations—Aberdeenshire, Argyleshire, Caithness, and Shetland, and the coast of Fifeshire, being all separately represented. A practical business knowledge of deep-sea fisheries of that class will be brought to the new controlling authority by another member; others have a practical acquaintance with the habits of river fish and the management of breeding ponds, with the salmon fisheries, and with the whole extent of the Scottish sea-board. The chief officers of the new department are a chairman and deputy chairman, elected from the members; a secretary, and an inspector of salmon fisheries.

District boards for encouragement of the fisheries have existed for years in several localities, also other societies or organizations for similar objects, such as the Board of British White Herring Fishery, the Commissioners of Scotch Salmon Fisheries, and the Scotch Fisheries Improvement Association.

According to the widely expressed terms of the act of Parliament establishing the new Board, much greater results are expected than were possible under the previous system of fishing administration.

> The Fishing Board shall have all the powers and duties conferred upon the [now dissolved] Board of "British White Herring Fishery," and shall take cognizance of every thing relating to the coast and deep-sea fisheries of Scotland, and take such measures for their improvement as the funds under their administration and not otherwise appropriated may admit of.

Further—

> The Fishery Board shall have the general superintendence of the salmon fisheries of Scotland, and shall have the powers and duties of commissioners under the salmon-fishery acts.

On such a basis as set forth in the foregoing quotations from the act of Parliament referred to, a wide field for work is opened up in the development of the fishing industry generally, in the improvement of the harborage and approaches of fishing ports, in the improvement of tackle and the build of boats, and also in bettering the condition of the fisher people.

With larger and better equipped boats, together with improved tackle, the fishermen will be enabled to proceed farther to sea, extending the area over which their operations may be carried on, and they will more readily obtain their cargoes and return to port.

Fishing in the Firth of Forth and adjacent waters has been for a few years back successfully carried on by steam trawlers, proving remunerative to the companies so engaged, and affording to the public a larger supply of fish than could be obtained previously. Nevertheless, trawling, as at present practiced, is strongly objected to by the fishing community, in as much as the trawlers are blamed for destroying the lines and nets of the fishermen, as also of spoiling the spawning beds, and exhausting the fishing ground.

The contention between the fisher people and the trawling companies is attracting considerable interest at present, and doubtless the subject is one which will receive early attention from the new fishery board.

The most important fishing stations in Scotland are situated on the northeast coast, along which there is quite an absence of natural harbors; and hence during the prevalence of gales, many lives of fishermen are lost, and much of their property is destroyed.

The work of building harbors of refuge, and of strengthening and repairing harbors and quays already existing, has been begun, but a great amount of work of such kind remains to be done in various places along the whole extent of the east coast of Scotland; and no doubt it also will receive early consideration of the Board.

Attention to the artificial breeding of fish, to oyster culture, and to improvements in fish curing, come likewise within the scope of the new Board's operations.

The great success which has attended the cultivation of oyster beds around the coast of France affords good reason to expect a similar result were oyster culture developed with equal skill and perseverance throughout the coast which begirts Scotland, which in every respect is well adapted for the purpose. There already exist various breeding tanks for salmon, for trout and for river fish, but those will increase in number under proper encouragement and according as information regarding them is more widely diffused.

Funds will soon be provided to aid in much of the work which comes within the jurisdiction of the new fishery board, as in addition to the annual treasury grant of $14,599.50 (£3,000), long enjoyed by their predecessors, toward the improvement of piers and quays, an additional sum is now paid from the surplus of the branding fees, amounting last year to another $14,599.50. (The branding fees are fees received by the British Government for affixing a brand on barrels containing a certain quality or kind of herring, which are then designated as "Crown brand.")

The Scottish fisheries are immeasurably greater and more valuable than those of England, although the latter have hitherto had the advantage of receiving larger sums from the public purse for encouragement of their fisheries. But, with such income for the fisheries of Scotland as above indicated, much may be done; and beyond a doubt, when the new fishery board for Scotland have got fairly into working order and the results of their operations are made known, further grants of money on their behalf will readily be obtained.

J. A. LEONARD,
Consul.

UNITED STATES CONSULATE,
Leith, December 30, 1882.

ITALIAN IMPORTS AND EXPORTS.

REPORT BY CONSUL DUNCAN, OF NAPLES.

The director-general of customs has published an official statement of imports and exports for the first three months, January 1 to March 31 of the present year, which is of interest in the present state of Italian finances, as indicating the direction of the flow of gold, and consequently, to some extent, the capacity of the Italian Government to maintain specie payments.

The imports amounted during these three months to 359,000,000 francs, this being an increase of nearly 54,000,000 francs over the imports for the same period of last year, 1882.

The exports for this period amounted to nearly 308,000,000 francs, being an increase over the same period for previous year of 18,000,000 francs.

This, then, shows a drainage of gold from the country of 51,000,000 francs for this period of three months, or at the rate of over 200,000,000 francs per annum. Supposing this rate to continue approximately the same, it would take but a little over three years to draw out of Italy the entire amount of the new loan of 644,000,000 francs, contracted for the purpose of resumption. This can certainly not be regarded as a very brilliant exhibit, and shows how difficult it will be for the Italian Government to maintain specie payments under the most favorable circumstances and how impossible to do so should peace be disturbed.

The increase of imports for this period of three months was mainly under Category XII of the Italian tariff which includes "minerals, metals, and manufactures thereof," thus covering importations of iron, steel, and all kinds of hardware. The increase in this category alone was from 45,000,000 francs, in 1882, to 89,000,000 francs the present year.

The chief increase in exports was in wine and olive oil, which latter article seems to have recovered from the damage done it two years ago by its mixture with cotton-seed oil. Such adulteration is no longer profitable on account of the duty imposed by the Italian Government on imports of cotton-seed oil, and shows how wisely the Government acted in taking the steps necessary to put a stop to this nefarious practice. The increase in wine exports for these three months was more than 14,000,000 francs over same period for previous year, the entire value being 26,000,000 francs. The olive oil export for said period of present year amounted to 214,649 quintals, valued at 29,000,000 francs, while for same period of last year it was 181,581 quintals, valued at about 25,000,000 francs.

There was a marked diminution in the export of Italian silks for present year from corresponding period of last year, amounting to over 8,500,000 francs, which is, of course, very unsatisfactory to one of the most important Italian industries. The value exported for said period last year was for 78,000,000 francs, while for this year is was only 69,425,000 francs.

B. O. DUNCAN,
Consul.

UNITED STATES CONSULATE,
Naples, May 30, 1883.

FOREIGN COMMERCE OF PORTUGAL.

REPORT BY CONSUL-GENERAL FRANCIS, OF LISBON.

It appears from statistical tables just issued by the "general direction of custom-houses" that a large diminution in the value of importation into Portugal is apparent in the returns now made of the amount of imports during the first quarter of 1883, *i. e.*, $7,314,762, against, for the same months of 1882, $11,736,641, thus showing a falling off of $4,421,879. This diminution involves nearly a million dollars' loss of revenue, and in that view is considered most unfortunate at this time.

In seeking for an explanation of the diminished importation it must be kept in mind that the anticipation of the imposition of greatly increased duties during the latter part of the year 1882 on sugars, tea, petroleum, rice, and cereals stimulated the introduction of those articles at the old low rates of duty. So it is contended that the diminished importations do not indicate in fact any decrease in the volume of general trade, however much it is to be regretted on account of the consequent diminished revenue.

Apparently a similar discrepancy exists in the exportations for the same period, but this arises entirely from the state of exchange between England and this country. For the period named in 1882 the total exports were $7,334,029, while in 1883 they were $6,143,450. The amount of exports in 1882 comprised a sum of $1,454,329 in sovereigns, which should not figure in the statistics as commercial products, while in 1883 the exportation of gold coin amounted to $27,000 only.

JOHN M. FRANCIS,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Lisbon, May 21, 1883.

GERMAN IMPORTS AND EXPORTS.

REPORT BY COMMERCIAL AGENT SMITH, OF MAYENCE.

I have the honor to transmit herewith a tabulated statement showing the amount in kilograms of the imports and exports of the German Empire during the months of January and February, 1883, as compared with the corresponding months of 1882. I have desired also to set forth the participation of the United States therein, but the statistics collated by the Imperial Government at Berlin are published in such a form that while professing to show the actual share taken by foreign nations in the import and export trade of the empire, they fail significantly to do so, owing to the practice which prevails of crediting to Hamburg and Bremen as imports therefrom or exports thereto articles of merchandise which happen simply to pass through those ports; as, for instance, petroleum, nearly all of which comes from the United States, of which in February, 1883, there were 89,438,600 kilograms imported, 36,447,500 of which the German Government states were from the United States, 35,948,100 from Bremen, and 9,336,100 from Hamburg. Tobacco and other articles, which come largely from the United States, make a like showing.

JAMES HENRY SMITH,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Mayence, April 25, 1883.

Statement showing the amount in kilograms of the imports and exports in the principal articles of merchandise of the German Empire during the months of January and February, 1883, *as compared with the corresponding months of* 1882.

[Quantities given in 100 kilograms net.]
(1 *kilogram*=2.204 *pounds avordupois.*)

Character of merchandise.	January, 1883.	January, 1882.	February, 1883.	February, 1882.
Guano, natural:				
Imports	23,727	19,620	76,398	83,291
Exports	2,500	318	2,824	704
Rags, of all kinds:				
Imports	30,045	26,383	27,992	28,448
Exports	19,548	22,090	25,390	21,910
Cotton, raw:				
Imports	202,052	116,981	201,959	117,855
Exports	16,349	11,796	14,241	8,455
Cotton yarn:				
Imports	16,580	14,437	15,839	13,310
Exports	7,820	9,576	6,652	8,695
Cotton cloth, goods, &c.:				
Imports	1,247	974	1,058	998
Exports	21,300	22,726	21,256	22,276
Lead:				
Imports	1,815	1,613	3,373	850
Exports	24,233	16,956	29,912	20,347
Druggists' articles and dyes:				
Imports	248,353	252,317	446,735	259,270
Exports	150,256	151,802	175,002	170,228
Iron and ironware:				
Imports	270,994	214,805	156,320	847,789
Exports	851,597	846,264	151,243	749,462
Cement:				
Imports	8,689	6,810	10,908	7,138
Exports	74,923	73,085	136,895	93,127
Lead and copper ore, also argentiferous:				
Imports	29,535	27,106	19,791	16,130
Exports	1,198	1,007	656	961
Iron ore, &c.:				
Imports	449,823	417,093	600,405	415,615
Exports	1,582,138	1,215,961	1,406,403	1,071,835
Flax and other vegetable material for spinning purposes, excepting cotton:				
Imports	198,068	173,307	187,116	172,293
Exports	86,788	85,505	83,587	91,298
Wheat (tare 1 per cent.):				
Imports	1,389,133	1,010,388	388,526	208,978
Exports	118,189	39,343	83,207	21,642
Rye (tare 1 per cent.):				
Imports	603,288	715,350	411,545	426,542
Exports	14,910	6,506	13,543	7,034
Oats (tare 1 per cent.):				
Imports	246,046	322,085	65,742	230,181
Exports	46,990	16,709	49,509	13,728
Pulse (tare 1.5 per cent.):				
Imports	62,729	69,595	35,309	39,161
Exports	33,335	16,480	51,601	49,703
Barley (tare 1 per cent.):				
Imports	631,160	405,859	198,453	262,026
Exports	24,161	89,289	42,905	52,426
Indian corn (tare 1.5 per cent.):				
Imports	111,962	234,147	68,418	112,151
Exports	437	444	143	4,754
Buckwheat (tare 1.5 per cent.):				
Imports	7,343	22,926	4,014	14,307
Exports	356	382	466	228

Statement showing the amount in kilograms of the imports and exports, &c.—Continued.

[Quantities given in 100 kilograms net.]
(1 *kilogram* = 2.204 *pounds avoirdupois.*)

Character of merchandise.	January, 1883.	January, 1882.	February, 1883.	February, 1882.
Malt (tare 2 per cent.):				
Imports	70,927	50,116	57,392	42,170
Exports	7,256	6,983	5,685	5,737
Rapeseed (tare 1.5 per cent.):				
Imports	80,512	144,374	53,402	27,434
Exports	132	1,547	858	2,205
Flaxseed:				
Imports	43,871	67,573	34,713	65,927
Exports	17,122	19,298	28,152	23,534
Clover:				
Imports	31,346	23,134	33,875	32,876
Exports	12,822	10,803	14,282	15,116
Potatoes:				
Imports	23,206	12,365	34,248	15,104
Exports	132,433	64,844	351,145	89,004
Fresh fruit:				
Imports	10,475	4,937	10,173	4,184
Exports	937	8,556	2,819	11,637
Fresh and dried chickory:				
Imports	4,232	5,010	2,021	6,952
Exports	5,639	5,094	6,116	6,783
Glass and glassware:				
Imports	3,986	3,705	3,652	59,264
Exports	51,382	50,497	3,833	42,486
Hair, feathers, and bristles:				
Imports	5,091	4,761	4,653	4,157
Exports	2,128	1,839	1,723	1,723
Hides and skins:				
Imports	39,142	32,280	45,151	34,829
Exports	11,837	14,801	14,290	15,025
Horns and hornpoints:				
Imports	4,256	4,036	3,793	5,312
Exports	693	779	569	811
Wood:				
Imports	662,405	773,490	688,027	508,893
Exports	278,357	263,468	362,732	278,096
Hops (tare 3 per cent.):				
Imports	1,055	865	481	505
Exports	4,257	6,068	3,184	5,934
Musical instruments:				
Imports	236	227	254	239
Exports	7,171	6,867	7,881	7,459
Locomotives:				
Imports	96	11	20	1
Exports	16,015	5,032	12,575	8,768
Transportable machines:				
Imports	961	152	440	377
Exports	503	276	210	391
Boilers of malleable iron:				
Imports	204	2	....	23
Exports	999	911	518	1,418
Other machines of all kinds:				
Imports	26,433	19,621	22,231	15,855
Exports	50,443	42,326	43,525	44,312
Caoutchouc and gutta-percha and goods made thereof:				
Imports	2,328	2,173	1,794	1,493
Exports	1,494	1,841	1,996	1,832
Made clothes and body linen and millinery:				
Imports	214	170	151	176
Exports	3,566	3,048	4,301	4,034
Copper, copper wire, and copper articles:				
Imports	9,103	7,415	8,502	7,255
Exports	6,036	9,551	7,925	7,531
Quicksilver:				
Imports	407	152	491	451
Exports	6	5	9	8
Articles made in whole or in part of precious metals, &c., watches:				
Imports	38	31	40	36
Exports	53	57	67	70
Leather and leather goods:				
Imports	5,799	4,565	5,685	5,378
Exports	9,046	9,327	10,027	9,477
Linen thread, linen, and linen goods:				
Imports	18,947	15,990	19,435	15,477
Exports	7,034	7,521	6,487	7,609

Statement showing the amount in kilograms of the imports and exports, &c.—Continued.

[Quantities given in 100 kilograms net.]
(1 *kilogram* = 2.204 *pounds avoirdupois.*)

Character of merchandise.	January, 1883.	January, 1882.	February, 1883.	February, 1882.
Candles:				
Imports	352	480	305	284
Exports	1,091	882	910	830
Beer of all kinds and mead (tare 3 per cent.):				
Imports	8,550	7,970	8,091	7,656
Exports	75,037	83,617	86,741	83,927
Arrack, rum, and peach brandy:				
Imports	2,959	2,374	2,667	2,249
Exports	57	227	58	179
Other brandy:				
Imports	293	774	386	474
Exports	56,611	151,535	33,393	81,006
Wine and must in casks:				
Imports	28,260	26,710	28,177	23,101
Exports	4,699	4,661	7,561	6,110
Sparkling wine:				
Imports	2,155	1,862	2,077	2,094
Exports	779	566	846	934
Other wine in bottles:				
Imports	525	491	474	467
Exports	1,910	2,012	2,623	2,252
Butter:				
Imports	3,254	3,288	2,371	2,476
Exports	9,638	7,441	9,571	7,598
Flesh:				
Imports	13,524	7,772	11,263	9,769
Exports	4,997	4,449	6,058	4,655
Dried cod:				
Imports	1,545	1,328	807	1,046
Exports	28	50	47	61
Fresh oranges, citrons, and lemons:				
Imports	11,114	9,310	17,895	11,801
Exports	1	3	3	1
Currants and raisins:				
Imports	12,296	9,332	10,817	7,979
Exports	....	....	....	....
Pepper:				
Imports	5,156	4,368	1,857	1,298
Exports	5	5	9	6
Salted herrings ....(casks)..				
Imports	129,027	115,285	18,161	16,541
Exports	39	24	73	69
Coffee:				
Imports	150,733	124,442	97,051	79,474
Exports	46	23	40	25
Cheese:				
Imports	2,575	2,249	2,475	2,239
Exports	3,112	3,024	2,970	3,157
Cocoa and chocolate:				
Imports	380	179	299	275
Exports	24	23	29	34
Fruit, dried, baked, &c. (tare 10 per cent.):				
Imports	16,865	9,114	8,892	6,958
Exports	173	117	162	97
Burnt or ground chicory (tare 12 per cent.):				
Imports	920	693	825	486
Exports	4,725	4,885	6,438	6,178
Starch (tare 12 per cent.):				
Imports	957	1,100	1,702	1,235
Exports	5,280	8,678	3,300	12,398
Starch flour, powdered arrowroot (tare 12 per cent.):				
Imports	134	209	100	179
Exports	9,934	27,171	10,243	20,204
Ground and shelled grain, &c. (tare 2 per cent.):				
Imports	15,789	17,791	13,001	11,619
Exports	4,273	2,453	3,221	2,137
Flour from grain and pulse (tare 2 per cent.):				
Imports	43,042	24,345	42,712	23,914
Exports	94,765	80,479	94,822	30,977
Rice:				
Imports	116,105	94,649	52,757	52,034
Exports	15	13	8	18
Salt:				
Imports	30,291	29,195	26,228	20,639
Exports	82,691	94,143	72,995	74,298
Sirup:				
Imports	1,584	1,398	1,739	1,26
Exports	1,092	132	133	9

Statement showing the amount in kilograms of the imports and exports, &c.—Continued.

[Quantities given in 100 kilograms net.]
(1 *kilogram* = 2.204 *pounds avoirdupois.*)

Character of merchandise.	January, 1883.	January, 1882.	February, 1883.	February, 1882.
Molasses:				
Imports	1, 052	728	2, 269	25
Exports	6, 193	3, 592	8, 065	4, 202
Unworked tobacco leaves:				
Imports	22, 159	18, 361	21, 377	18, 312
Exports	2, 269	549	475	603
Tobacco stems:				
Imports	2, 230	1, 870	2, 100	1, 781
Exports	....	....	....	....
Cigars:				
Imports	256	316	265	269
Exports	241	225	245	208
Stemmed tobacco:				
Imports	....	....	....	....
Exports	269	2	393	266
Smoking tobacco and other articles of tobacco, not including snuff and chewing tobacco:				
Imports	288	167	474	579
Exports	137	79	105	49
Tea:				
Imports	1, 798	1, 570	1, 168	1, 105
Exports	22	26	15	20
Sugar:				
Imports	6, 540	4, 938	2, 049	2, 379
Exports	548, 601	256, 512	469, 139	135, 194
Oil and fats:				
Imports	95, 192	73, 882	91, 169	70, 222
Exports	11, 265	10, 379	10, 529	13, 186
Paper and articles of pasteboard:				
Imports	5, 868	9, 198	4, 983	7, 037
Exports	61, 307	56, 633	63, 543	62, 599
Furs:				
Imports	18	14	15	7
Exports	18	108	37	151
Petroleum:				
Imports	618, 286	628, 954	276, 100	218, 801
Exports	1, 018	993	333	2, 042
Silk and silk goods:				
Imports	3, 506	3, 490	3, 651	3, 121
Exports	4, 442	5, 213	4, 359	5, 058
Slate:				
Imports	41, 929	53, 289	14, 510	18, 969
Exports	1, 006	433	1, 121	961
Coal:				
Imports	905, 961	1, 099, 561	869, 285	852, 135
Exports	6, 788, 571	5, 597, 019	6, 729, 817	5, 279, 104
Coke:				
Imports	144, 195	177, 602	109, 692	172, 262
Exports	478, 396	410, 185	432, 210	382, 745
Peat:				
Imports	1, 944, 743	1, 744, 234	2, 329, 184	1, 800, 587
Exports	42, 514	34, 735	33, 244	29, 181
Tar:				
Imports	16, 908	13, 006	17, 017	13, 841
Exports	7, 703	8, 501	10, 591	5, 782
Pitch:				
Imports	1, 705	1, 080	2, 167	1, 646
Exports	17, 199	16, 760	19, 338	15, 063
Asphalt:				
Imports	4, 731	4, 661	10, 903	3, 776
Exports	4, 271	6, 069	8, 863	10, 601
Turpentine and resin:				
Imports	10, 646	19, 416	11, 447	12, 122
Exports	1, 703	2, 010	3, 560	3, 910
China, porcelain, and stoneware:				
Imports	30, 528	34, 604	32, 262	35, 659
Exports	158, 575	186, 837	456, 677	278, 043
Horses:				
Imports ... head	7, 396	5, 325	8, 960	6, 173
Exports ... do	2, 569	2, 604	1, 916	1, 754
Steers:				
Imports ... do	57	26	33	24
Exports ... do	1, 078	574	713	740
Cows:				
Imports ... do	5, 372	3, 967	6, 157	5, 118
Exports ... do	3, 451	2, 852	3, 879	3, 106

Statement showing the amount in kilograms of the imports and exports, &c.—Continued.

[Quantities given in 100 kilograms net.]
(1 *kilogram* = 2.204 *pounds avoirdupois.*)

Character of merchandise.	January, 1883.	January, 1882.	February, 1883.	February, 1882.
Oxen:				
Imports ....do...	1,826	810	2,444	925
Exports ....do....	4,047	4,552	4,703	3,961
Young cattle under 2½ years old:				
Imports ....do....	2,403	1,524	2,176	2,303
Exports ....do....	3,795	3,692	3,443	3,649
Calves less than six weeks old:				
Imports ....do....	3,061	2,632	3,393	3,648
Exports ....do....	4,435	4,475	3,860	4,150
Swine:				
Imports ....do...	45,979	77,099	54,493	72,052
Exports ....do....	20,363	23,386	20,090	20,057
Sucking pigs under 10 kilograms:				
Imports ....do...	5,907	7,295	11,302	11,295
Exports ....do....	1,910	1,907	2,320	3,189
Sheep:				
Imports ....do ...	1,587	259	1,054	472
Exports ....do....	126,829	63,987	117,515	112,772
Lambs:				
Imports ....do....	149	249	286	109
Exports ....no....	134	323	319	465
Sheep wool, raw and washed:				
Imports..................	60,735	56,762	64,827	65,889
Exports..................	8,638	7,412	8,533	8,074
Shoddy and waste wool:				
Imports..................	3,768	4,507	3,632	3,935
Exports..................	10,031	12,736	10,155	10,781
Woolen yarn:				
Imports..................	11,522	10,928	14,020	11,649
Exports..................	3,641	3,759	2,816	3,541
Woolen goods:				
Imports..................	1,152	1,182	1,295	1,387
Exports..................	18,616	18,115	17,286	16,409
Zinc:				
Imports..................	2,332	1,617	2,754	2,691
Exports..................	31,703	45,443	23,616	48,705
Tin:				
Imports..................	5,929	4,136	4,683	3,889
Exports..................	453	876	390	292

INCREASE OF BELGIAN IMPORT DUTIES.

REPORT BY CONSUL WILSON, OF BRUSSELS.

I have the honor to report that a bill has just been passed by the Senate and House of Representatives of this country, largely increasing the import duties on tobacco, coffee, cacao, vinegar, alcohol, and alcoholic spirits. In recommending the passage of this bill to the Chambers, the minister of finance gave as his motive the fact that the importers of this merchandise, knowing that the Government contemplated in the near future a very considerable increase of their entry charges, had stored an enormous quantity of them in the warehouses appropriated to merchandise entered for consumption, with the object of thus escaping the increased duty when the new tariff law would come into force.

According to the statement laid before the Chambers by him, there was imported into the country, ostensibly for consumption, from the 1st of November, 1882, to the 31st January, 1883, 8,016,000 kilograms of leaf tobacco, and of coffee 14,924,000 kilograms, whilst during the preceding year the importations of tobacco only amounted to 2,242,000 kilograms, and of coffee to 5,310,000. The amount of these importations has been so largely in excess of the demand for consumption that the legislature, under the conviction that a fraud upon the revenue was intended by the importers, passed the bill almost without discussion, but, as they did not wish to resort to retrospective legislation, they enacted that it should take effect immediately after its passage, and inserted a provision that if the duties should be definitely modified so as to correspond to the provisional tariff of this law before the first day of August next, any excess imposed by it should be remitted to the importers.

Notwithstanding the fact that this law is but provisional, it applies to some of onr exportations, and its tariff provisions may become permanent; consequently I give below a translation of the five articles of which it is composed.

Provisional tariff bill on tobacco, coffee, cacao, whisky, and vinegar.

ARTICLE 1. The duties on coffee and tobacco shall be provisionally modified in the following manner:

		Francs.
On raw coffee	per 100 kilos	30
On roasted coffee	do	40
On leaf tobacco	do	100
On cigars and cigarettes	do	300
On other manufactured tobacco	do	130

ART. 2. The Government is authorized to provisionally modify the duties on cacao, alcohol, spirits, vinegar, and acetic acid, in the following manner:

		Francs.
On cacao	per 100 kilos	50
On prepared cacao	do	65
On brandies and whiskies of at least 50° strength when in barrels	per hectoliter	100
And for each degree above 50°	do	2
When in bottles (without distinction of the degree)	do	200
On all other spirits	do	134
On vinegar and other liquids of acetic acid, and containing less than 8 per cent. of pure acetic acid	per hectoliter	12
More than 8 per cent. and less than 50 per cent	do	50
Fifty per cent. and more	do	80
On crystallized acetic acid	per 100 kilos	100

ART. 3. If the duties on the above articles shall not be definitely modified according to law before the 1st of August, 1883, the duties now in force will again be applied.

ART. 4. Any difference between the duties received in virtue of this act and those which will be imposed after August 1 will be returned to the parties concerned.

ART. 5. This bill shall take effect the day after its publication.

JNO. WILSON,
Consul.

CONSULATE OF THE UNITED STATES,
Brussels, June 4, 1883.

SPANISH WINES IN FRANCE.

REPORT BY CONSUL RHODES, OF ROUEN.

In reference to the report of this consulate on French wines, it was stated by the Bordeaux Chamber of Commerce, in the communication to the French minister of commerce, that the wines of Spain, Italy, and Portugal are already falsified when they arrive in France. Herewith is transmitted a Spanish journal containing a protest against that statement.

ALBERT RHODES,
Consul.

UNITED STATES CONSULATE,
Rouen, April 18, 1883.

[Extract from El Hareuse, weekly paper.]

PARIS, *February* 13, 1883.

Mr. Editor of El Hareuse:

DEAR FRIEND: Referring to what I told you in my last, the consul of the United States at Rouen has presented a memorial to the minister of agriculture and commerce of France [it is scarcely necessary to say that the consul did not proceed in the manner indicated], declaring that the wines and spirits sent from this country are falsified to a great degree, and indicating the prohibition of entry for such products in the United States.

The minister has transmitted a copy of said memorial to the Board of Trade of Bordeaux in order that it might give judgment, and I hasten to inform you and the readers of your paper of this famous

Protest of the Board of Trade of Bordeaux.

"BORDEAUX, *January* 17, 1883.

"MR. MINISTER: You have done us the honor to send us a report from the consul of the United States at Rouen, concerning the *adulteration of wines in France.*

"This memorial, entirely a personal work, and based upon vague generalities, compromising only the responsibility of its author, shows three kinds of adulteration:

"1. By the mixing of different kinds of wine.

"2. By the addition of foreign substances to the natural wine or mixed wine.

"3. By the extraneous products of the vine.

"In reality, these two last means of falsifying combine one alone, which includes all the substances used surreptitiously to alcoholize and give color to the native wines, in order to be enabled to water them and reduce their price.

"In the mean time the first kind has the especial quality of being considered good even by the Consul of the United States. And in fact Paris, which is both the largest depository and the greatest center of consumption, does not manufacture wine; it is supplied by all the celebrated vintagers, and by one of the most essential procedures of vinification has given always as a basis of its trade the mixing of weak wines with those stronger, those sour with those mellow, those light with wines of greater body and coloring, all in the proportion required by the tastes and character of customers. These mixtures are not made in Paris alone; they are likewise made in Rouen, and in all places where the same exactions of price and quality are imposed upon the trade. Can this be called falsifying? Would it not be, more properly speaking, simply vinification, good and profitable to all interests?

"To the charge of falsifying, which the consul of the United States brings against the mixtures, he adds another much more grave, that of using for the market the denomination of wine of Bordeaux.

"To this second charge, which implicates an indelicate act with the character of a crime severely punished by the penal code, we must oppose that fraud upon the nature of merchandise belongs to all trades as well as to all countries, and that the French law (C. P., 423) has done all that was necessary to repress it, which law can be appealed to, in case of necessity, by the party deceived; and this charge agrees, therefore, with those which they do not wish to pursue with the severity due to crime and allow the abuse of their good name, making it depend upon the conditions of the price as in opposition to the quality. Aside from this standpoint the trade of Bordeaux, which, truly speaking, is not that directly assailed, and whose loyalty has for guarantees the most ancient traditons, cannot do better than to place its wine-vaults and depositories for wine at the disposal of the consul of the United States as they are held for everybody, the same for the unsuspecting as for the critical purchaser, and all may freely make such investigations and analysis as they think proper.

"Concerning the falsifications denounced to his Government, we shall not follow the consul of the United States in the enumeration of the vegetable and mineral substances which are to a greater or less degree useful in the combinations of the falsifier, but we must say that it is a matter which should have been inquired into with a little more impartiality, and might be also with more careful information, whether these adulterations are not rather the work of a foreign production and trade than that of the French vintages or merchants, as seems to be intimated by the tenor of his report.

"We should think we have offered an insult to the knowledge of vinification of the consul of the United States if we should venture to inform him that the wines of Italy, of Spain, and of Portugal, as well as those of other countries, reach us in France *all* adulterated; that is to say, alcoholized, colored, and mellowed in a large proportion by means of processes which have been brought to perfection in our day, but the origin of which dates back to the most remote ages.

"France is, in reality, nothing more than the tributary of the adulterations which are made in foreign countries, in the true sense of the expression used by the consul of the United States, and she is not alone in admitting them to her commerce, although during the last four years of scarcity the foreign exportation furnishes in a much larger proportion the other countries of Europe and America.

"Certainly we must deplore the fact that our products do not suffice for the necessities of our exportation and of our home consumption as in times past; but nobody can question the excellence of our purchases or the superiority of our system of vinification.

"Apart from a few exceptions that inevitably are found in all trades, and which a slack vigilance and a superficial investigation of such matters have nearly always generalized, the wine trade in France possesses in the fullest measure the confidence which has been ever accorded to it in all the markets of the world for its professional merit and that practical pre-eminence which is envied by foreign countries. If it is very plausible that the consul of the United States should feel compelled, by the duties of his office to inform his Government of the fraud which may be practiced in the preparation of a first-class article of consumption, such as wine, it is no less obvious that a person of such exalted attainments as he possesses should have made a study more thorough and less prejudiced of this subject, presenting each side in its true light; and with regard to ourselves, Mr. Minister, if we were commissioned to reply to the consul of the United States at Rouen we would tell him (espousing with him the cause against fraud) that the exorbitant [customs] duties are the chief cause of adulteration, certainly protecting it indirectly; that the pure and wholesome wines of the French viticulturists have not disappeared from our markets, and that the importation of them into the United States would be more practicable and more general if the heavy duty imposed upon them were more reasonable.

"Please have the kindness, Mr. Minister, to present to the president of the council, minister of foreign affairs, the considerations which have been suggested to us by the report which you have transmitted to us on his behalf, and for which this Board of Trade thanks you most cordially."

COMMENTS OF THE CORRESPONDENT OF EL HAREUSE.

Italians Spaniards, Portuguese, &c., do you not see that this protest by which the Board of Trade of Bordeaux denounces you to the whole world as falsifiers of wines offers an insult like that of the 28th of December?

I imagine I hear, even at the distance which separates us, a voice which says to me, "*For this journey there was no need of a portmanteau*," and, in fact, it is not necessary to consider the question very fully to see clearly as the light of day that said protest, silly from first to last, simply shields the liability of the consul of the United States at Rouen, for it justifies the three kinds of adulteration denounced by him.

I will prove this:

The statistical records collected by the administration of customs show us the extent of the importation and exportation of wines, concerning the foreign trade of France during the first eight months of 1882, compared with the corresponding periods of the years 1881 and 1880.

Importations.

ORDINARY WINES IN CASKS.

Imports from—	1882.	1881.	1880.
	Hectoliters.	*Hectoliters.*	*Hectoliters.*
Spain	3,746,338	4,001,275	3,686,381
Italy	504,595	1,382,300	1,232,448
Other countries	493,480	420,264	371,132
Total	4,744,413	5,803,839	5,289,961
In bottles	2,890	2,636	2,447
Grand total	4,747,303	5,806,475	5,292,408

The foregoing figures show us that Italy and the other countries have exported to France one-fourth the wines that Spain has; but if we add to this that in the month of August last 466,588 hectoliters of wine were entered into France, of which 372,627 were sent from Spain, 8.615 from Italy, and 85,346 from other places, we shall see that the wines exported by all these countries collectively, in comparison with Spain, interfere little or nothing with the French trade.

All these wines, without distinction of the places from which they come, according to the declaration of the Board of Trade of Bordeaux in the above letter, are received into France all falsified.

Let us see the—

Exportations.

ORDINARY WINES IN CASKS.

From—	1882.	1881.	1880.
	Hectoliters.	*Hectoliters.*	*Hectoliters.*
From Gironde	766,189	727,408	727,698
From other places	915,375	852,127	790,257
Total	1,681,564	1,579,535	1,517,955

ORDINARY WINES IN BOTTLES.

From Gironde	68,475	70,116	78,625
From other places	148,277	137,431	164,921
Total	1,898,316	1,787,082	1,761,501

The average amount of the exportations of fine wines is 40,000 hectoliters.

As may be seen, all this is made clearly manifest by the administration of French customs, which places us in the way of the following considerations:

1st. That France is the tributary [tax-payer] of Spain and of other countries in the matter of wines.

2d. That such wines, not being adequate of themselves alone for the general consumption, must necessarily be mixed with the French wines.

I do not propose to enter into the consideration of how many acres of vineyards are required in Gironde to meet the demand for the consumption of her wines, if none, absolutely none of this wine which they call that of Bordeaux deserves the title of *kind or imitation of Bordeaux;* but tell me if 834,664 hectoliters of ordinary wine, produced in Gironde, in the year which has just expired, have been exported to foreign countries, can it be proven that there remains not a single one of the 1,049,460 hectoliters which, proceeding from Spain, Italy, and Hungary, obtained entry in that year at the port of the capital of Gironde?

In conclusion, and casting upon Italy, Spain, and Portugal, &c., the odium of the adulterations which the consul of the United States at Rouen imputes to the French wines, does it not seem logical that France, being the tributary of those countries, should assume the responsibility of her own deeds?

And although those wines of foreign product, falsified as well as others, are all intended for mixing with French wines, is it not obvious that by this fact the French wines are necessarily also falsified? Or can it be that the foreign wines only are consumed among the large dealers, and the pure French wine, in its purest state, is that reserved exclusively for general use [or consumption]. *Heroic self-abnegation!*

The Board of Trade of Bordeaux believes that it underrates the viticultural knowledge of the consul of the United States by telling him that the wines of Italy, Spain, Portugal, and other countries reach France *all falsified*, and does not think it assails the integrity of the trade or that of the proprietors of those countries, which is worth as much as their own and as much as that of the consul. And they call this simple statement of a thing, the publicity of which is not justified by any chemical analysis whatsoever, viticultural knowledge; and the purchasing of falsified wines they term as the excellence of their purchases; and the mixing of it with their own, the superiority of their work of vinification!

It would have been far more profitable for them to confine themselves to declaring as lawful the systems of vinification known as producing excellent results in Paris, in Rouen, and in other places by the mixing of different kinds of wine, rather than to recognize the tributaries of falsifiers.

Seeking pretexts for defense of an untenable position, and preferring them to the true motive which all the world knows, is to wish to emulate the school-boy who upon being asked by the master, "Simpleton, who did this?" with eyes filled with tears, and overwhelmed with compunction, replies, "I did not do it; my brother did it."

What nonsense!

LINDORO.

POSTAL SAVINGS BANKS IN AUSTRIA.

REPORT BY CONSUL-GENERAL WEAVER, OF VIENNA.

I have the honor to inclose herewith duplicate copies of the law of March 28, 1882, passed by the Austrian Reichsrath at its last session, and recently approved by the Emperor, establishing a postal savings bank in this empire, which shall go into operation on the 1st of January next.

The law is accompanied by a careful translation of the original text; likewise by a translation of the ministerial decree relative to the establishment of the Board of Council, and also by a translation of an article cut from the Neue Freie Presse of 14th October, 1882, giving a valuable *résumé* and elucidation of the law. As these papers may be valuable for comparison in case of need, I have had them carefully prepared, so that they might be published in our monthly reports, providing such a disposition should meet with the approbation of the Department.

JAMES RILEY WEAVER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Vienna, November 14, 1882.

Law of May 28, 1882, *regarding the introduction of postal savings banks in the countries represented in the Reichsrath.*

With the consent of both houses of the Reichsrath, I am pleased to order as follows:

ARTICLE 1. Under the administration and security of the state, there will be established in Vienna a Government savings bank, belonging to the department of the minister of commerce, and subject to the postmaster-general, under the title "K. K. Postsparcassen-Amt" (Imperial Royal Postal Savings Bank).

The sphere of action, organizing, and number of persons employed will be made known by special decree.

As depositories of the postal savings banks shall serve the post-offices designated for this purpose by the minister of commerce in the countries represented in the Reichsrath.

The postal savings bank is charged with the administration and carrying out of the business specified by this law; it represents publicly to this end the State Government.

For rendering advice, as well as for proposals in matters which concern the postal savings banks, a Board of Council will be established.

The regulations concerning the formation of this Board, as well as the rules Governing its sphere of action, will be made known by special decree.

ART. 2. The postal savings bank receives the deposits made at the post-offices, and pays out again deposits notified for withdrawal through the post-offices.

ART. 3. All deposits in excess of the current expenses will be invested at interest by the savings bank. Interest on deposits will be procured by purchase of Austrian Government securities paying interest.

ART. 4. Interests as well as the total expenses of administration and other outlays will be defrayed from the proceeds of the savings thus invested.

As long as these proceeds are not sufficient to pay the interest and the expenses of administration, the deficit as well as the expenses of establishing the institution will be covered by loans advanced by the post-office department.

These loans are to be repaid to the post office department out of realized surpluses at the close of the fiscal year, without any interest.

The surplus remaining after the redemption of the above-mentioned loans will be used for the formation of a reserve fund.

RT. 5. Every depositor will receive from the post-office where he makes his first sit a deposit book, in which is entered every deposit made, amount drawn out, and amount of capitalized interest. Each subsequent deposit can be entered in the book at whatever post-office it is made.

The person in whose favor the deposit was made will be regarded as the depositor. The deposit book will be given free of charge, and is exempt from stamp duty.

The postal savings bank will open an account with every depositor.

ART. 6. The deposit book will bear the name of the person for whom the deposit was made, and contain the memoranda necessary to the identity of the same, as well as the signature of the depositor.

Depositors who cannot write must bring with them a reliable person who can vouch for the identity of the depositor and sign the deposit book in his stead.

A transfer of the deposit book to another person will be considered valid only when the act of transfer has taken place before a post-office official authorized by the postal savings bank.

When this is done, the person to whom the transfer was made will be regarded as the owner of the deposit book. (Article 21, line 3.)

Minors likewise are entitled to make deposits, independently, and to draw out money, provided the legal guardian makes no written protest at the postal savings bank against it.

In case a deposit book is lost, a duplicate will be issued in accordance with the provision prescribed in article 14.

For one and the same person only one postal savings bank deposit book can be issued.

Whoever takes out two or more deposit books loses the interest on the capital inscribed in the second book or in those issued subsequently. If, however, the total amount of the deposits in two or more deposit books which the depositor had caused to be issued exceeds 1,000 florins, or if the depositor had deposited more than 300 florins within one year in the two or more books issued to him, then will the depositor lose, in the first case, that part of the capital which surpasses 1,000 florins, and in the second case, that part of the capital which surpasses 300 florins.

The minister of commerce is authorized, for reasons worthy of consideration, to remit the loss of capital resulting from the foregoing clause.

The post-office employés are prohibited from giving information to any one whomsoever, except to their superiors, concerning the names of depositors and amounts paid in by them.

ART. 7. Each deposit must amount to at least 50 kreuzers or a multiple of 50 kreuzers. The total amount deposited in one year shall not exceed three hundred florins, after deducting the sums which have been drawn out during the year.

The amount due to a depositor, in deposits made and interest on capital, shall not exceed the sum of 1,000 florins after deducting the amounts which have been drawn out.

Deposits to the amount of 50 kreuzers may be made in postage stamps, or in special postal savings marks, as soon as the issue of such by the minister of commerce takes place. They must be pasted upon blank forms, which will be furnished free of charge.

ART. 8. The rate of interest for deposits is fixed at 3 per centum per annum. The rate of interest can be changed only by legislation.

ART. 9. The interest on the deposits begins on the 1st and 16th of the month following the day the deposit was made, and ends on the last or 15th of the month preceding the day on which the notice of withdrawal was received at the post-office in Vienna. Amounts of less than one florin will not bear interest. On the 31st of December of each year the interest will be added to the capital, and will likewise henceforth bear interest.

For calculations of interest, the month will be taken at thirty days.

The officially prepared table of interest will be posted up publicly at the places for collection (post-offices).

ART. 10. An amount exceeding the sum of 1,000 florins will not bear interest.

ART. 11. The office of the postal savings bank is obliged to notify the depositor by registered letter to reduce his capital as soon as the deposits and capitalized interest of a depositor exceeds 1,000 florins. If the depositor has not reduced his credit during the month following this notice, there will be purchased for his account, after the lapse of this period, Government bonds of the common state debt, paying interest in paper to the nominal value of 200 florins at the current rate of exchange, of which proceeding the depositor will be notified.

No interest will be paid for the time which elapses between giving notice and the period when the reduction of the credit of a depositor takes place.

In case the respective depositor shall not have taken possession of the securities bought for his account, the office of the postal savings bank shall draw the interest of these bonds which are in its keeping, and place it as a new deposit to the credit of the respective depositor in the books of the institution.

A book shall be issued to the depositor for such Government bonds as are deposited for him in the office of the postal savings bank.

ART. 12. At the wish of the depositor, and in accordance with the sufficiency of his credit, may the deposits be devoted to the purchase of Austrian Government securities.

Art. 13. The repayment of the credit, or a part of the same, to the depositor or to his legal successor or attorney shall take place upon a notice of withdrawal, which may be done at any place of collection (post-office) designated by the party giving notice.

The payment is made at the place of collection designated in the notice (post-office) on presentation of the deposit book, by virtue of an order from the office of the postal savings bank, except in cases where the provisions as mentioned in article 14 are applicable, or where a protest which has been made (articles 6 and 17) prevents it.

Notified amounts up to 10 florins will be ordered by the office of the postal savings bank to be paid at the places of collection (post-offices) by return of mail, and will be cashed immediately after arrival of the order of the office of the postal savings bank.

The payment of amounts between 10 and 100 florins will take place at the latest in fifteen days; that of amounts between 100 and 500 at the latest in a month; that of amounts above 500 florins at the latest in two months after the arrival of the notice.

Art. 14. If a deposit book is lost, the following proceedings take place: The owner, in order to obtain a duplicate, shall immediately inform the office of the postal savings banks, either direct or through the nearest place of collection, of the loss, with the most accurate description possible of the marks of the book.

The office of the postal savings banks shall note immediately upon its books a memorandum, to the end that for the present payment upon the lost deposit book may be made to no one. At the same time the office of the postal savings banks shall publicly post up at the post-office which issued the lost book, and at that one to which the book would perhaps be presented, an edict by which all are reminded that after the expiration of one month from the date of publication, if within that time no claim for the lost book was made, it will be declared null and void, and a new book will be issued.

If no claim is made within a month, a duplicate will be issued by the office of the postal savings banks on payment of 10 kreuzers, and the deposit book which was lost will be declared as null and void. If a claim is established within a month, the office of the postal savings bank must refer the party to the proper judge for decision, and neither permit the issue of a duplicate nor allow any disposition of the lost book to be made until judgment in regard to the claim set up has been given by competent authority.

Art. 15. The provisions of paragraph 1480 of the common civil law, according to which demands of arrears of interest cease after a lapse of three years, will not be applied to deposits made in the postal savings banks. In regard to the prescription of postal savings bank deposits the general provisions of the common law are in force.

Deposits falling under the law of prescription revert to the post-office department.

Prescription is interrupted by every new deposit, by every notice of withdrawal, and by every entry of interest on the deposit book.

Art. 16. The Government securities purchased by the administrators or at the request of the depositor, and held in safe-keeping by the savings bank, shall revert to the post-office department if no one applies during forty years either for the securities themselves or for the interest, or if the depositor has never during that length of time made any other application whatever to the postal savings bank concerning the capital or the interest.

Art. 17. Deposits made in the postal savings banks, as well as deposit books, are neither subject to attachment nor can they be mortgaged. Neither is the executive surrender of a postal savings bank deposit book admissible. These provisions have no application in regard to the books issued for purchased state *rentes*, as mentioned in articles 11 and 12.

If a depositor is in bankruptcy, the administrator is empowered to give notice to the postal savings bank to draw out and receipt for the balance to his credit.

A protest against the return payment of deposits can receive consideration only in a case of a suit at law for the ownership of the deposit book, or under the presumption mentioned in article 6.

Such a protest must be made in writing, addressed to the office of the postal savings bank in Vienna, accompanied by the proofs necessary to form a judgment.

Art. 18. The reserve fund, the immediate purpose of which is to cover possible losses which the postal savings bank may possibly encounter, is to be formed by depositing the surpluses which have remained at the close of the fiscal year, after deduction of defrayed interest, expenses of administration, and other outlays, and the return of advances made by the post-office department.

The reserve fund is gradually to be increased until it reaches 5 per centum of the total amount of deposits; it shall not, however, exceed 2,000,000 florins, Austrian currency.

Art. 19. The sums forming the reserve fund are to be invested at interest, and the occasional profits will be added to the reserve fund until the latter has reached the fixed maximum.

When the reserve fund has reached the prescribed limit, the entire surplus will be accreditedas receipt to the post-office department.

Art. 20. The office of the postal savings banks will render due accounts of all deposits made at the places of collection (post-offices), and will be controlled by the chief comptroller.

At the end of every calendar year the minister of commerce will report to both houses of the Reichsrath the general condition of and the business done by the postal savings banks, and will cause it to be published in the official part of the Wiener Zeitung.

The office of the postal savings banks will periodically publish in the Wiener Zeitung the condition of the institution.

Art. 21. The correspondence of the office of the postal savings banks and employés with the depositors is free of postage.

The income of the postal savings banks is free from taxes. The deposits addressed to the office of the postal savings banks, to the officers and employés by depositors or by persons empowered by them, as well as the documents for a transfer, as mentioned in article 6, are free from taxes and stamps, and the interest on the deposits is exempt from income tax or any tax taking its place.

Art. 22. The time when the office of the postal savings banks in Vienna and the places of collection will commence operations will be fixed by the minister of commerce.

Art. 23. The minister of commerce is intrusted with carrying out of this law.

Schönbrunn, May 28, 1882.

FRANCIS JOSEPH.
TAAFE.
PINO.

THE BOARD OF COUNCIL OF THE POSTAL SAVINGS BANK.

First. The Board of Council established by virtue of article 1 of the law of May 28, 1882, shall be an advisory body to the minister of commerce in regard to the business of the office of the postal savings banks.

Second. The Board of Council consists of nine members, viz:

1. A president, nominated by His Majesty the Emperor for the term of five years.
2. Four experts, nominated by the minister of commerce from the industrial and mercantile classes.
3. Three government officials in active service, nominated likewise by the minister of commerce.
4. The director of the imperial royal office of the postal savings bank.

Third. Two members, experts, taken from the industrial and mercantile classes, and one member taken from among the Government officers will go out each year according to the turn established in the first year by drawing lots. In the places of those whose term of office has expired, the Board of Council will elect two members from the industrial and mercantile classes of the population, and the minister of commerce will nominate a new member from the ranks of Government officials. The ex-members of the Board of Council can be re-elected, respectively renominated. The minister of commerce has the right to dissolve the Board of Council at any time, in which case, however, he will take pains that an immediate formation of a new Board takes place.

Fourth. Members who die or are lost to the Board of Council by other means are replaced in the same manner and at the same time in the category to which they belonged as if they had left in the turn decided by lot.

Fifth. The members of the board must have their domicile in Vienna, with exception of the president and two members taken from the technical men of the industrial and mercantile circles, whose domicile is not limited to Vienna.

Sixth. As members of the Board of Council, can be elected only such persons who, by virtue of the law of April 2, 1873, R. G. B. No. 41, are eligible to the Reichsrath (paragraphs 19 and 20).

Members who, during their term of office, should lose their right to be elected are to be regarded as members whose term of office has expired.

Seventh. The Board of Council shall meet in the rooms of the office of the postal savings bank by invitation of the president presiding. In case the president be prevented from being present, the minister of commerce shall nominate a deputy for the time of prevention.

Eighth. The regular annual meeting of the Board of Council shall take place after the yearly balance has been struck by the office of the postal savings bank—that is to say, upon communication from the director to the president. Aside from this, the Board of Council shall meet as often as the minister of commerce orders, the director desires, or at least four members of the board demand it. The respective communications are to be addressed to the president. Upon invitation of the presiding officer, functionaries of the ministry of commerce or other persons may be invited as experts. These experts have no right to vote.

Ninth. Those members of the Board of Council who are not Government officials shall lay their affirmation into the hands of the minister of commerce.

The office of a member of the Board of Council is honorary and without remuneration. Those members who reside outside Vienna have a claim to a remuneration of 8 florins per day and traveling expenses, according to a schedule to be made.

Tenth. The Board of Council shall have the right to examine the books and accounts of the office of the postal savings bank, and to ask information of the directors concerning the condition and business manipulation of the office. The Board of Council shall make suggéstions concerning improvements in the business manipulations of the office of the postal savings bank, either in consequence of intimation of the minister of commerce or of its own accord, and submits the respective bills to the minister of commerce. Changes in the regulations of the general management, as well as in the fundamental outlines for the organization of the office of the postal savings bank, and the statutes of organization for the Board of Council, shall not be made unless the Board of Council has given its opinion in regard to the utility of the alteration.

Eleventh. The Board of Council shall take its resolutions by a simple majority of the votes of the members present in the assembly, convoked according to rule. To a valid resolution of the Board of Council the presence of at least six members, aside from the president, is required. A record of his resolutions shall be kept by the directors of the office of postal savings bank, to be submitted to the minister of commerce.

The director shall have a right, in a given case, to put on record his negative vote, and to represent it in a separate petition.

Twelfth. The Board of Council shall regulate its own business management, subject to approval of the minister of commerce.

THE PRACTICAL USES OF THE SAVINGS BANKS.

[Translation of an article appearing in the Neue Freie Presse of October 14, 1882, on the formation of the Postal Savings Banks in Austria.]

The regulations necessary to carry out the law of May 28, 1882, concerning the postal savings bank have been approved by the Emperor.

At the beginning of next year the postal savings bank will commence its operations, and if the institutions shall prosper it must be free from the bureaucratic spirit from which so many institutes in Austria suffer.

An effort to accomplish this is seen partially in the regulations of the organization, but particularly from the blank forms prepared for the use of the public. They excel in brevity and clearness of text, convenience and perspicuity: for instance the forms for the transfer of deposit books, for the protest against payment to minors, for the request for the purchase or sale of Government securities, for authorizing the drawing out of one or more deposits, the forwarding of interest coupons, &c. All these blank forms can be had free of charge at the post-offices, are exempt from taxes and stamp duty, and will be sent free of charge when declared as mail matter containing deposits or as registered letter.

The deposit book is handy, practical, and neatly gotten up, which cannot be said of all Government blank forms.

Every depositor finds in his book a short enumeration of the most important regulations and privileges, being an advantage over all deposit books of existing postal savings banks; a table of postal savings banks; a table of interest from which he can learn at a glance the amount of interest due on any capital and for any space of time, as well as the amount due him in a separate column, much more distinctly than in the books of other countries.

We wish now to describe, for the clear understanding of the public, the method of making a deposit as provided by the law. A person wishing to make a deposit in the postal savings bank goes to the nearest post-office, pays over the amount desired, which, however, cannot be less than 50 kreuzers, and receives thereupon a deposit book bearing his name, which henceforth he can present at any time at any post-office in the Austrian Empire to make further deposits, which will be placed immediately to his credit by the official, with signature and seal, and be separately receipted for by the office of the postal savings bank by letter, free of postage, wherein he is informed of the receipt of his last deposit and the amount now due him, which must correspond with the entries made on his book. If this should not be the case, he must immediately remonstrate, which he can do by tearing off a perforated blank form attached to the book, fill it out, and put it in the nearest letter-box. This insures safety to the depositor and serves as a control over the post officials. The interest will always be added by the office of the postal savings bank on the 31st December. To this end the depositor must send his deposit book post paid on the anniversary of his first deposit to the office of the postal savings bank in Vienna, in conformity with the rules of the English post-office savings bank. Of course he will not lose his interest should he fail to send in his deposit book. Simultaneously with the deposit book, the depositor receives a notice book which contains ten blank forms of notice of withdrawal. These notices bear the printed number and series of the book.

If he wishes to draw a certain amount, he simply takes his notice book, fills out the blank with the sum he desires to draw, names the post-office where he wishes the payment to be made, and puts it in the nearest letter-box. If he wishes registration, he must ask for it at the post-office, where it will be granted free of charge.

By return of mails he receives a check, upon presentation of which at the post-office singled out by him he will immediately receive payment. He must bring with him his deposit book, in which the payment will be entered. Should he not desire to draw the amount himself, then he must authorize a person for the single case. A depositor may therefore give notice in Graz, demanding payment to be made in Prague, and authorize a person in Prague to receive the amount.

This convenience and novelty benefits especially the traveling workingman, who in this manner may send home his savings; the merchant, who thus can send money to his commercial traveler; and the small tradesman, who by these means may fulfill his obligations in the city. It was proposed that the money should be paid by the letter-carrier at the same time that he brought the check, which for the present, however, could not be done, owing to existing post-office regulations, which is much to be regretted.

According to the provisions of the law, a depositor is not allowed to have more than one deposit book; however, for a third person a deposit book may be taken and deposits made; for instance, a father for his children, or an office servant for his institution. It is likewise provided that not more than 300 florins be deposited in one book in a single year, and altogether not more than 1,000 florins. To watch over this is the duty of the office of the postal savings bank. These maximums, however, may be reduced by payments or by the purchase of Government interest-bearing securities.

In order to make it possible to save smaller amounts than 50 kreuzers, the following provision has been made:

Oblong pieces of white card-board will be issued, having a 5-kreuzer postage-stamp imprinted in one corner, with a space for pasting on nine additional postage stamps of 5 kreuzers each. Such a "savings card" can be bought for 5 kreuzers wherever postage-stamps are sold. When the savings card is filled up with ten postage-stamps, including the one imprinted, it represents the minimum of a deposit of 50 kreuzers, and may be offered as such at any post-office, and, if it is the the depositor's first deposit, then a book will be issued to him. Children will in this manner be stimulated to deposit their savings by having an opportunity to watch, so to speak, the growing of their savings with every new 5-kreuzer postage-stamp pasted on.

If a deposit book is lost, the nearest post-office is to be advised, and after one month's delay, if not recovered, the book will be canceled free of charge; payment in the mean time to any one on the book is stopped and a new one will be issued free of charge. The officials and chiefs of the post-office are bound to treat the personal matters of the depositors as office secrets to their fullest extent; they are not allowed to give information to any one except to their superiors, otherwise they are liable to discharge.

All blank forms employed are printed either in German alone or in two languages, and are lettered, which serves at the same time as marking the series in the deposit books.

The post-offices must render their accounts daily to the chief office in Vienna of all moneys received or disbursements made, on the basis of which the latter makes its daily balance. The deficit or surplus which results is settled every day by the cashier's office of Lower Austria in Vienna.

The organization of the office of the postal savings bank is as follows: At the head is a director, who receives his orders direct from the minister of commerce. The number of employés will be taken partly from the ranks of Government officials and partly be made up from persons engaged for the purpose on monthly pay.

A pension fund will be raised for these from rates deducted from their wages, according to the profits realized by the institution. The remuneration of the post-office officials is for the present fixed at the following rates: One kreuzer for every deposit made at that particular office; five kreuzers for every book issued by that particular office and existing at the end of the year (first deposit); for every thousand florins paid in, deducting the repayments up to 20,000 florins, 1 florin and 50 kreuzers; up to 40,000 florins, 1 florin and 25 kreuzers; higher amounts, 1 florin. This remuneration is a trifle higher than the one received by the officials in England and Italy, for this reason, that, particularly in Austria, these employés will have to use their influence to make the institution popular, to which end they are best adapted.

The postal savings banks have moreover everything in their favor, since the communication between the depositors and the savings banks and the office of the postal savings bank in Vienna, is carried on by about four thousand post-office officials now in existence, with each one of whom they can without difficulty make deposits and receive payments.

No depositor is henceforth required to make long journeys to deposit his savings as has been the case heretofore in the provinces. He will no longer be compelled to lose a working day to make a deposit or receive a payment.

It is to be hoped, therefore, that the post-office savings banks will flourish here in Austria as they do in England and in Italy. It is greatly to be desired, for economy is the mother of wealth.

DENMARK AS A GRAIN-PRODUCING COUNTRY.

REPORT BY CONSUL RYDER OF COPENHAGEN.

I have the honor to hand herewith a report on the future prospects of Denmark as a grain-producing country.

Denmark must undoubtedly be classed as a specially agricultural land; by which is to be understood a country not only capable of feeding itself, but one that after supplying the wants of its own population is still in possession of such surplus stocks for export as will suffice, in a great measure, for the purchase of such required articles of industry and necessaries as are not produced in the country.

The changes which have taken place in many countries from a condition of agricultural pursuits to those of industry and manufactures have never been of an immediate nature, but rather through a stage of gradual steps, occasioned in part by a falling off in the yield of the land, but in greatest measure by a rapid increase in the population, and it will therefore be necessary to investigate in what way such causes may be tending to a change in the same direction in this country.

The following table of surplus exports of cereals from 1864 to 1882 point to such a falling off in the exports that it is necessary to seek after the causes of this retrograde movement; the more especially as it cannot be attributed to any serious failure in the crops, as the published annual harvest returns do not in any way show any material variation in the harvests during these periods. These exports have been as follows:

Years.	Grain in unground state.	Grain in ground state.	Total.
	Barrels.	*Barrels.*	*Barrels.*
1864–'67	2,743,000	162,000	2,905,000
1867–'72	2,488,000	270,000	2,758 000
1872–'77	1,120,000	550,000	1,679,000
1877–'82	722,000	578,000	1,300,000

It should be observed that whilst this retrograde movement has been going on, an increased area of about 13 per cent. has been brought under cultivation from 1866 to 1881. As the falling off cannot be attributed to a succession of bad harvests, it is necessary to search for the cause in *other directions*; and here an explanation seems to lie at hand.

The population of Denmark from January, 1865, to the time when the census was taken in February, 1881, shows an increase from 1,700,000 inhabitants to 1,969,000, and the population at the present time may be fairly estimated at 2,020,000; that is to say, an increase of population during this period of about 320,000, or not far from 20 per cent.

During the same period the stock of horned cattle has been increased by 276,000 head (23 per cent.), and hogs and pigs by 146,000 head (38 per cent.), and furthermore it must not be forgotten that cattle-feeding in the present days is carried on in this country under a very much more profuse system than was the case in former years.

It is thus made evident that notwithstanding the increase of area brought under cultivation, the greater relative increase of population and of live stock, together with the more generous method of feeding, the same quantity of surplus cereal stock for export could not be maintained on the same basis as those of fifteen to eighteen years ago; and also as a portion of the land which was formerly employed in the culture of the four cereals which form the main exports, namely, wheat, rye, barley, and oats, is now used in cultivation of other products, such as sugar beets, &c.

As before stated, the four descriptions of cereals which constitute the main exports from Denmark are wheat, rye, barley, and oats; and of these rye would seem to be the one which will first give way, and that the day is apparently not very remote when Denmark will be unable to feed its inhabitants with rye of its own production.

The increase of population, combined with the marked progress of late years in the general well-being of the people, has led to a largely increased consumption of this article, which forms the chief bread consumption of the country. A large call on this cereal is made by the spirit distilleries; so that even now it is only possible with the assistance of a good harvest, and with a large import of maize from the United States, that there can be any surplus stock for export. Something similar may be said with regard to barley, although for this description of cereal the falling off may only be felt at a much more remote period than with rye.

Wheat is the kind which has maintained its surplus export with most steadiness; it has continued to retain it side by side with the increase of population and home consumption; but, as before said, it must be borne in mind that wheat bread is only consumed here to a very trifling extent as compared with rye, and that consequently it suffers less from the increase of mouths to be fed. It is maintained by many that this steady decline in the surplus grain exports is mainly to be accounted for by the changes which have taken place of late years in agricultural pursuits in this country, and the equivalent is to be found in the increase which is shown in the exports of live stock and their products. This, however, I think to be too sanguine a view when looking at the following table of the surplus cattle exports and their products:

Years.	Horned cattle.	Beef and sausages.	Pork hams.	Lard.	Butter.
	Head.	*Million lbs.*	*Million lbs.*	*Million lbs.*	*Barrels.*
1874-'77	82,400	1.45	7.99	3.21	107,400
1878-'81	74,400	0.39	4.76	5.94	83,200

Against these figures there is certainly to be found an increase in the surplus export of swine, sheep, and lambs, which, however, do not counterbalance the falling off in the above-mentioned articles.

That a very marked advance would be shown in the surplus exports of live stock and their products if compared with those of 1865 is not to be denied; but it would appear as though the culminating point has been reached in the five years from 1872–'77, up to which time this increase of surplus exports of live stock and products may be fairly placed as a counterpoise against the great decline which had then been shown in the grain exports, and that up to this period they had not been much affected by the simultaneous increase of the population; but that subsequent to 1872–'77 live stock and dairy products have scarcely been able to maintain their position against the large increase of consumption which has since been taking place of beef and butter amongst the masses of the public; and therefore in the same way as a falling off has been shown in grain exports, a similar one, though to less extent, may be looked forward to amongst the other branches of farming interests.

In replying now to the question as to how long Denmark may be expected to rank as a grain exporting country, when a calculation is made of the harvest yields, of the quantities required for home consumption, with the steady increase of the population and in the numbers of the live stocks, it seems most probable that even before the close of the present century Denmark will only have a surplus grain export under exceptionally good harvests, and that in unfavorable years an importation may even be necessary.

That an increased export in the other branches will be able to offer compensation for this loss is very doubtful, and therefore in the establishment of new industries to trade and shipping must be looked for the means of paying for the imports required by the community.

HENRY B. RYDER,
Consul.

CONSULATE OF THE UNITED STATES OF AMERICA,
Copenhagen, April 10, 1883.

NORWEGIAN COD FISHERIES.

REPORT BY VICE-CONSUL ISDAHL, OF BERGEN.

I have deferred for some time sending this dispatch in order to be able to state the total efficient returns of the cod fisheries in the Lofoden islands and in the other principal fishing districts in the north. These are now published. The inclosed table No. 1 will show the quantity caught and the production of the different goods resulting thereof.

The total catch in Lofoden and other districts, running up to nearly 24,500,000 of cod fish, shows a difference of 15,500,000 from last year, when the catch amounted to about 40,000,000. The reason for this considerable falling off cannot be attributed, as usually, when one year's catch proves smaller than another, to hinderances from fishing by storms and rough weather, but must be ascribed to the fact that the fish this year did not approach our coast and enter our "fjords" in such large quantities as usual.

It is a general belief that the cod-fish which yearly visits our coasts, have been suffering for several years for want of sufficient food. In this season the fish proved to be even thinner and more meager than last year. When, under ordinary circumstances, 300 to 400 fish are required to fill a barrel with livers, the average quantity needed in the preceding season was about 700 fish; this year it has raised from 700 to 900, and sometimes up to 1,500, according to the different places. This circumstance will reduce the production of oil in a very considerable degree. When, further, 4 to 5 barrels of livers have been used for rendering a barrel of steam-refined oil, being the double of what is required when the liver is fat, it is evident that the quantity of all oils will be very limited. The poorness of the livers will also, no doubt, have influence upon the quality of the oil. I beg to inclose a statement, No. 2, showing the quantity of steam-refined oil produced in this season in the different catching districts compared with the production for the preceding five years. Of oils, it is merely the steam-refined cod-liver oil which is exported from here to the American market.

According to the official report, 31,200 men have been engaged in the fishing in Lofoden. Of this number, which is the largest ever recorded, were 7,800 men net fishers, 19,750 long-line fishers, and 3,650 deep-line fishers. In 1882 the number of fishers amounted to 27,500, in 1881 26,700, and in 1880 25,500 men.

The number of vessels present in the district was smaller than last year. The largest number is stated to be 583; last year this reached 666. The number of boats amounted to 7,870, which is the greatest number ever known to have been gathered in Lofoden.

The weather was as always somewhat unfavorable in the beginning of the fishing season, but later it was upon the whole very favorable. In all there were thirty-two good sea days and thirty-two days when only a part of the day could be used for fishing. The season for catching in Lofoden lasts from the middle of January to the middle of April. Thirteen boats were wrecked and seventeen persons were drowned during the catch.

The average prices were 22 kroners for liver and 36½ for fish roe per barrel, and 23¾ kroners for raw fish per 100 pieces.

The gross value of the catch is estimated at four and four-fifth millions of kroners, against six and four-fifth millions in 1882, five and one-tenth in 1881, and six and four-fifth millions in 1880.

The gross average earnings amount to 90 kroners for a net fisher, 200 kroners for a long-line fisher, and 80 kroners for a deep-line fisher, against, respectively, 70 kroners, 340 kroners, and 150 kroners in last year.

The catch in Finmarken has not yet begun. The prospects for this fishery seem this year to be very doubtful. The prices of all fish goods have, therefore, risen considerably. A barrel of steam-refined oil costs at present $85.

JOHN C. ISDAHL,
Vice-Consul.

UNITED STATES CONSULATE,
Bergen, April 30, 1883.

Statement showing the quantity of cod-fish caught in the different fishing districts and the quantity of goods resulting thereof.

Districts.	Cod-fish.	Steam-refined oil.	Liver.	Fish roe.
		Barrels.	*Barrels.*	*Barrels.*
Lofoten	16,100,000	850	12,250	14,300
Nordland	4,250,000	....	4,600	4,800
Nordmor	1,750,000	75	750	1,500
Romsdal	200,000	20	90	80
Sondmor	2,200,000	100	1,000	2,000
Total	24,500,000	1,045	18,690	22,680

Statement showing the production of steam-refined oil in the different fishing districts compared with the production in the five years past.

Districts.	1883.	1882.	1881.	1880.	1879.	1878.
	Barrels.	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*
Sondmor	100	600	2,200	4,500	2,700	1,200
Nordmor	50	60	800	1,800	(*)	(*)
Romsdal	20	40	450	950	500	650
Lofoten	850	1,300	2,570	3,065	2,750	3,660
Nordland						
Finmarken	(†)	2,100	4,000	3,400	3,080	(*)

* Unknown. † Fishing not yet begun.

OLIVE OIL, PURE AND ADULTERATED.

REPORT BY CONSUL WELSH, OF FLORENCE.

Thinking that perhaps the test recently discovered by Prof. E. Bechi for determining the purity of olive oil may be of service to the authorities of the United States and the importers of olive oil, I submit the following:

The adulteration of olive oil in Italy has long been known to exist, and cotton oil has been so freely imported from the United States for that purpose that the Government has largely increased the duties thereon, the law of May 30, 1878, having fixed a duty of 6 lire per quintal, and the law of April 7, 1881, having established a duty of 20 lire per quintal, as the Italian Government considers it of the highest importance that exports of oil for whatever use should be in quality as pure as may be possible.

The test of Prof. Commendatore Bechi, director of the Technical Institute and of the Agrarian School, is as follows:

In a glass bulb place 5 cubic centimeters of the olive oil to be tested; add to this 25 cubic centimeters of alcohol of 98° areometer. Then add 5 cubic centimeters of the test, which is composed thus: One gram of crystallized nitrate of silver dissolved in 100 cubic centimeters of alcohol 98° areometer. The bulb containing the matter just described is then placed in water, the temperature of which must be brought to 84° centigrade (151° Fahrenheit). After half an hour's immersion, the oil, if injured, becomes of a dark, muddy color, and with practice and caution the actual proportion of the adulterating liquid can be determined.

Another method is to place 5 centimeters of the oil in a bulb and add thereto 30 centimeters of alcohol 98°. Shake the mixture thoroughly, and then let it rest until the oil and alcohol separate. Then transfer the alcohol to another glass bulb and add the test (same quantity as before). Put the bulb in the bath and heat the water to the same grade (84° centigrade or 151° Fahrenheit), when, if the oil is impure, a distinct dark color will be produced. This test is based on the essential quality possessed by the glyceride of the cotton oil to reduce the nitrate of silver. It is always well to also use the test with pure olive oil, when, if the oil be thoroughly pure, no discoloration will be observed.

WM. L. WELSH,
Consul.

UNITED STATE CONSULATE,
Florence, May 2, 1883.

OPENING OF THE AMSTERDAM EXHIBITION.

REPORT BY CONSUL ECKSTEIN.

I have the honor to report that the International Colonial and Export Trade Exposition at Amsterdam was officially opened yesterday, May 1, by the King of the Netherlands, in the presence of the Queen, their Majesties' suites, many high officers of state, provincial and municipal officers, army and navy officers, foreign ministers and consuls, commissioners appointed by different Governments, and over two thousand other invited persons.

The ceremonies observed on the occasion, for which extensive and careful preparations had previously been made, were most appropriate and interesting in a high degree. They took place outdoors, and as the weather was exceptionally and extremely beautiful the entire programme was carried out most successfully.

It was the original plan, object, and aim of the projectors to have the exhibition ready and finished in all its parts on May 1, as well as to open it on that day, but they failed in accomplishing it. However, it certainly was not from any want of skill or energy on the part of those who had and have the matter in hand, but in consequence of obstacles beyond their control.

With fine weather continuing and the application of further exertions such as have been displayed during the past few weeks, the whole exhibition will be in a state of perfect completion in a very short time.

I regret to have to record that our people remained to the last stoically and inexplicably apathetic in the matter.

It appears to me as if there had been almost inexcusable indifference manifested.

I cannot at this moment state the precise number of exhibitors from the United States, but do not think it exceeds forty. This certainly seems an insignificant participation on our part, when compared with France, from where 1,600 to 1,700 exhibitors are registered; with Belgium, of nearly an equal number; with Germany, which has about 1,200 exhibitors here.

England is not so strongly represented, as only from 400 to 500 parties engaged space.

I can only say that if our manufacturers, producers, &c., are still as desirous as they appeared to be a short time ago to compete for and extend their foreign trade, they committed a blunder in not discerning that making a full display here of all kinds of goods would, in a measure, undoubtedly have proven to be a means to that end.

The opening day of this exhibition will be one long to be remembered by the good people of Amsterdam. So much gayety, life, and bustle has not often been witnessed here before. The day was observed as a sort of holiday; the Bourse was closed. The holiday is not over yet; the festivities still continue. The city is full of strangers, more particularly from the neighboring cities, but amongst them are hundreds from all parts of the world, mostly persons interested as exhibitors or in some other way.

Other visitors from abroad are but few as yet, and there are not likely to be many during the next few weeks, for it is to be supposed

The movement, nevertheless, is likely to be crowned with success at a not very distant day, as it has culminated in the recent offer of a bill in the Second Chamber of the States-General (Dutch Parliament) by the Government, by which it is proposed to change the present law regulating the suffrage question, and thereby legally qualify a large number of persons to vote who hitherto did not enjoy this privilege.

The election law now in force dates from the year 1850, and is based upon article 76 of the constitution (Grondwet) of 1848.

By the article of the constitution referred to it is provided that the members of the Second Chamber of the States-General shall be elected in the districts into which the country is divided for the purposes of elections by the inhabitants (males) of full age (twenty-three years), being subjects of the King of the Netherlands, in the full enjoyment of civil and civic rights, and paying in *direct taxes* a sum as shall, in accordance with local circumstances, be required by the suffrage law, but not less than 20 and not exceeding 160 florins per annum.

In the Netherlands, therefore, the right of voting for members of the Second Chamber of the States-General is vested in persons answering to the following requirements, which each elector must possess:

1st. He must be a subject of the King of the Netherlands;
2d. He must be an inhabitant;
3d. He must be of full age (twenty-three years);
4th. He must be in the full enjoyment of civil and civic rights; and
5th. He must pay a certain amount of direct taxes.

The four above first-named requirements are generally considered and conceded to be indispensable under all circumstances; it is only with respect to the fifth point, by which persons are required to pay a certain amount of direct taxes to be entitled to vote, that great dissatisfaction has so long existed, and in respect of which a change is generally felt to be of the utmost necessity and earnestly demanded.

The law of 1850, passed in pursuance of article 76 of the constitution, contains a schedule wherein the amount of direct taxes required to be paid in the several electoral districts of the Netherlands, that is, 20 florins as minimum and 160 florins as maximum, was established. Its defects are held to be glaringly apparent and clearly evident from the fact that under its operation the right to vote is withheld from a great number of such persons as are in a high degree possessed of the intellectual and character qualifications to fit them for electing members of the Second Chamber of the States-General, and this because they happen to pay no direct taxes or only an insufficient amount.

In a list of names recently published of persons thus excluded from voting appeared those of many high officers of state, professors of universities, doctors, lawyers, &c.

Again, it is claimed that the law as it stands creates unjust discrimination and inequality, as it confers the privilege to vote upon so much larger a number of persons in some of the electoral districts than are entitled to or eligible to vote in other districts.

For illustration I give the following statement, showing the various electoral districts into which the country is divided, their population in 1877, the number of voters in each in same year, the number of inhabitants to each voter in the various districts, and the number of repre-

Silk.—The reduction of duties on *silk*, in which North Italy is so largely interested, will doubtless be favorable to an increase of business.

Works of art.—But while the foregoing modifications of our tariff may be regarded as favorable to an increase of business, the same cannot be said as to the change of duty on *works of art* (paintings, statuary, &c.,) in which Italy is perhaps almost more interested than any other country. The principle on which works of art for public institutions have been hitherto admitted free, and for individuals at the moderate duty of 10 per cent., was that the introduction of what tended to educate and elevate the public taste ought to be encouraged. As Italy is a country where Americans invest largely in works of art of all kinds, this action of Congress is of course not well received. Nor does it seem to be more favorably regarded by American artists residing in Italy for the purpose of study and the exercise of their profession than by Italians. A prominent American artist from Rome told me a few days ago that all but one of those resident there were opposed to any duty at all on objects of art, and considered that the best encouragement our Government could give to American artists was to promote by free admission whatever tended to cultivate and educate the popular taste for art. He said the artists contemplated taking steps to make their views on the subject known publicly before the meeting of the new Congress next autumn. He added that in Italy every facility was afforded American artists for the prosecution of their studies, and that they felt highly indignant that our Congress should act so illiberal towards Italian artists in return. He said, too, that they were afraid the Italian Government might be induced to impose an export duty of 30 per cent. on all objects of art made by American artists in Italy, which, while it would only be a just retaliation, would have the effect of driving them all out of the country and excluding them from all the advantages of art study in Italy.

If this is the feeling among American artists, the very class Congress intended to benefit, and we see that it is the same in New York, Paris, and Munich, of course it is still stronger among Italian and other foreign artists, against whom the action was directed.

B. O. DUNCAN,
Consul.

UNITED STATES CONSULATE,
Naples, April 28, 1883.

THE ELECTIVE FRANCHISE IN HOLLAND.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

The necessity and desirability of an extension of the existing elective franchise has been long since recognized by the mass of the people throughout this country.

For the purpose and to the end of accomplishing this important object an agitation was begun many years ago; and whilst it constantly and steadily increased, participated in by public meetings, political clubs, and the press, discussions on the subject were always characterized by extreme moderation and calmness.

once gone into is thus explained: That for this purpose it would be necessary for a law first to be passed by the States-General establishing the fact that grounds exist to take the proposal of revising the constitution into consideration; that after the promulgation of such a law the Chambers would have to be dissolved and new Chambers elected; and that any proposed alterations in the constitution require the votes of two-thirds of the members present at the sessions of the new Chambers, whereat such alterations would be brought to a vote.

Before concluding this part of my report I would state that it may be observed from the figures in the foregoing statistical table that the Second Chamber of the States-General, the popular branch of the national legislative body of this country, is composed of 86 members; that in 1877 these were chosen by 122,511 voters out of a population numbering 3,861,682 souls, or about 1 voter out of about 31 of the inhabitants.

Still it cannot be said that, up to the present, the introduction of general suffrage is strongly favored by public sentiment.

PROVINCIAL STATES.

A legally qualified voter for members of the Second Chamber of the States General is also entitled to vote for a member or members of the provincial states (*provinciale staten*). The provincial states are not legislative bodies, but their powers and functions have, more properly speaking, an executive and administrative character, and are confined to the provinces respectively. In one particular they may be likened to our State legislatures, for as by them are chosen United States Senators, so do the provincial states elect the members of the First Chamber of the States-General.

The country is divided into eleven provinces, and there are, of course, as many provincial states, whose membership are prescribed by law or royal resolution, and differ as to the number of members comprising them and in accordance to the size, population, and still other considerations respecting them.

The provincial states of North Brabant consist of 64 members; Gelderland, 62; South Holland, 60; North Holland, 72; Zeeland, 42; Utrecht, 41; Friesland, 50; Overyssel, 47; Groningen, 45; Drenthe, 35; and Limburg, 45.

CITY COUNCILS AND CHAMBERS OF COMMERCE.

To be entitled to exercise the ballot in electing members of any city council (*Gemeente Road*) one must possess the qualifications required by article 76 of the constitution, already above described, with only this exception—that the amount of direct taxes contributable is in this case only one-half of the respective amount necessary to be paid in order to constitute a voter for members of the Second Chamber of the States-General and of the provincial states. Chambers of commerce (*Kamers van Koophandel*) are in this country so very differently constituted establishments from what chambers of commerce are in the United States, that I concluded to give a somewhat detailed account relating to them, thinking it may prove interesting, if not useful.

Here they are, in a sense, regular Government institutions, as will be noticed from the following, viz:

Pursuant to a royal resolution, dated the 9th of November, 1851, amended by royal resolutions of February 16, 1854, August 11, 1859, and of July 12, 1873, it is, amongst other things relating to their organization and establishment, ordered and decreed:

That chambers of commerce and industry are, with the approval of His Majesty the King of the Netherlands, established at every place throughout the country where the significance of the trade and industrial pursuits render such establishment desirable in the opinion of the local authorities.

The object of these chambers is to furnish the general as well as the provincial and local Governments within whose jurisdiction they are established, either on a desire being expressed by them to that effect, or whenever the said chambers consider it important, with information respecting commerce and industry, and to submit their opinion or to make propositions on subjects connected therewith.

It further lies within the scope of their labors to make such communications to the merchants and manufacturers of the places where they are situated as the said Governments may desire, or as they, the said chambers, may deem expedient in the interests of commerce and industry.

In order to be eligible as a member of one of these chambers it is required that the candidate be at least thirty years of age, that he reside at the place where the chamber is located, and that during at least five years he has stood at the head of a commercial or industrial enterprise at such place or held a position in some establishment connected with the said branches.

In order to be entititled to vote in electing members of the chambers of commerce and industry, it is required that the party be a subject of the King of the Netherlands, of full age (twenty-three years), an inhabitant of the place or district wherein the chamber is established, in the full enjoyment of civil and civic rights, and that in respect of his license to carry on a commercial or industrial enterprise he pays taxes to or exceeding the amount to be fixed for each chamber by the King, after consulting the local authorities and the provincial states, the amount which he pays in license taxes as a partner in a firm being considered as a personal payment.

For Amsterdam the minimum amount so fixed by royal resolution of March 2, 1852, is 75 florins per annum.

Excluded as voters are those who do not answer to the above requirements, and those who have at any time made a judicial surrender of their property in favor of their creditors, and have not paid the full amount of their claims.

Under this system there are in the Netherlands at the present time 70 chambers of commerce. The number of members of which each chamber is to be composed is also fixed by the King, and at present varies all the way from five members, in the smallest and least important places, to twenty-one members, in the largest cities or places having the largest amount of commerce and industry, the Chamber at Amsterdam consisting of eighteen and that of Rotterdam of twenty-one members.

Many of the places where such chambers exist have populations numbering from 10,000 to 15,000, and several of them even below 5,000 souls.

The members of a chamber of commerce do not receive any remuneration, but they appoint a salaried secretary, whose compensation, as well as necessary expenses attending the proceedings of such chamber, are defrayed from an annual sum granted for that purpose by the common council of the city or place where the chamber is established.

Under the elective system of the Netherlands, as now prevailing, there are chosen by the popular vote the members of the Second Chamber of the States-General (the popular branch of the legislative body of the country), the members of the provincial states (executive or administrative bodies for and within the several provinces), and the members of all city councils and chambers of commerce, and *when this is done there is an end to all voting by the people.*

All positions, from the highest to the lowest, in the civil service of the Government are filled by appointment.

What a remarkable contrast is therefore exhibited between this and our country, when it is observed *how little voting is done and how few voters there are in the Netherlands.*

In this connection I desire to observe that it is not the elective system alone which presents so great a disparity between the two countries, the same being noticeable in respect of many other national institutions and laws.

For example, I would mention that neither the jury system nor capital punishment exists now in the Netherlands.

Trial by jury was introduced in this country during its occupation by the French (1810–1813).

On the 2d of December, 1813, the Prince of Orange (William I) accepted the sovereignty of the Netherlands, and one of his first acts was to abolish trial by jury. (Resolution December 11, 1813.)

The jury system, existing here less than three years, could therefore not have been fairly tested, but having been a French importation, introduced by Napoleon, was, presumably, like himself, very much detested in the country, and had to go.

The use of the guillotine was abolished by the same resolution, and hanging reintroduced.

Capital punishment was finally done away with by the law of September 17, 1870, excepting as for certain offenses committed in time of war and as laid down in the military penal code, and for the crimes of rebellion and conspiracy on board a man-of-war on the sea or in a foreign country.

Since 1861 there has been no one executed in Holland.

If by what is herein stated will be manifested that great dissimilarity exists in respect of certain national institutions and laws between this and our country, it will, I think, go far to prove that such may be the case between different countries without preventing either from being wisely, well, and liberally governed, as is, I believe, universally acknowledged to be the case with the United States and the Netherlands.

D. ECKSTEIN, *Consul.*

UNITED STATES CONSULATE,
Amsterdam, December 21, 1882.

CHARITABLE INSTITUTIONS OF FLORENCE.

REPORT BY CONSUL WELSH.

Thinking it may be of interest to the Department and to philanthropists in general to be informed of the charitable institutions of Florence and its district, I append the following report:

Since the twelfth century hospitals for the relief of the sick have been from time to time established in Florence, and, according to the reports of Giovanni Villani, over 1,000 beds were provided by the year 1340.

In the thirteenth century a foundling hospital was projected, the first of the kind in Europe. In the year 1244 twelve captains, appointed by Fra Pietro, of Verona, organized a refuge for orphans of both sexes, still well known under the name of "Bigallo," and about 1370 the celebrated Michele di Lando originated a society for mutual relief among wool-carders. Most of these institutions were under the control of priests and clerical corporations.

The Italian law of 1862 improved the regulations for this branch of service, which had been long mismanaged, and placed it under the control of the municipal and provincial authorities.

The province of Florence, which, according to the last census, contains 510,531 inhabitants, supports 635 charitable institutions. Of these, 39 were established before 1500, 271 from 1500 to 1700, 166 from 1700 to 1800, and 159 from 1800 to 1880.

Charity has not languished through so many centuries, but the kinds of relief given varied according to social development. At first public and private charities were limited to relieving people afflicted with sickness and poverty; then foundling and orphan asylums were founded. In the eighteenth century little was done with regard to education, but in this century, Sunday, daily, and evening schools were inaugurated in connection with the asylums, as also agrarian and technical schools.

Some of these charitable institutions are endowed, and others to a great degree dependent on donations; the former numbering 163, with endowments amounting to 55,777,214.10 lire, and the latter numbering 472, with assets of 5,767,299.11 lire, making together 61,544,513.12 lire, the property of 635 charitable institutions in the province of Florence. But in spite of this the number of mendicants in the city and country is great.

The expenses of administration of these institutions amount to 990,517.71 lire yearly, and the sums devoted to them, viz, the interest on invested capital, is about 8,215,092.30 lire.

Therefore the expenses of administration are about 12 per cent. of the income. Subsidies of various kinds are granted to the extent of 1,153.93 lire per 100 inhabitants, viz, 11.52 lire per capita.

The following statement will show the classification of charitable institutions, viz:

	No.
For the refuge and assistance of sick persons	21
For the assistance of ill persons in private houses	8
For the carriage of sick persons or dead bodies	14
For the assistance of women in confinement	1
For the relief of poor (clothing and food)	12
For the relief of poor (money)	49
For the relief of poor (clothes only)	17
For the relief of poor (loans on pledges)	6
For the refuge of invalids and relief of young girls	9
For the refuge and assistance of orphans	11
For the instruction and education of poor children	54
For the support of students	27
For the support of young girls	406
Total	635

In the city of Florence the number of charitable institutions is 202, distributed as follows, viz:

	No.
For the assistance and relief of patients (endowed) hereinafter described	15
For the relief of the poor	158
For the instruction and education of children	29
Total	202

There is a large excess of homes for girls over those for males. There is as yet no hospital for convalescents, and the system of affording assistance to the poor in their homes is very deficient up to the present time, although very important for moral and hygienic considerations.

On the contrary, there is much money devoted to donations for girls twenty-one years of age, or at the time of marriage, which donations vary from 10 to 1,500 lire.

Of the 202 institutions, 3 are for Protestants, 30 for Jews, and the remainder for Roman Catholics.

WM. L. WELSH,
Consul.

UNITED STATES CONSULATE AT FLORENCE, ITALY,
February 23, 1883.

Statement of endowed charitable institutions in Florence.

Institutions.	Object.	By whom established.	When established.	Capital.	By whom managed.	Yearly expenses for—		Remarks.
						Administration.	Charitable purposes.	
				Florins.		*Florins.*	*Florins.*	
Arcispedale Santa Maria Nuova.	Refuge and assistance of sick persons.	Folco Portinari	XIIIth century.	13,962,906.88	Government officer.	205,717.96	852,365.40	The hospital owns land, buildings, &c. Supplies 1,200 beds; 9,318 patients treated during the year 1881.
Lunatic asylum	Refuge, assistance, and care of lunatics.	Frate Leoni and Frate Diciotto.	1643, Feb'y 3	246,000.00	A gratuitous committee and a salaried physician.	43,303.71	380,749.05	The asylum owns furniture and moneys; 224 patients treated during the year 1881.
Spedale San Gioanni di Dio.	Assistance and care of sick persons.	Simone Vespucci	1400, July 12	1,189,089.63	Special committee.	3,049.42	53,323.03	354 patients treated during the year 1881.
Spedale degli Innocenti.	Refuge, assistance, maintenance, and education of foundlings.	do	1419	8,567,447.35	Government officer.	113,507.29	520,075.23	Received 981 children; 204 legitimate and 777 illegitimate.
Pia Casa di Lavoro	Refuge for invalids; subsidies to families; working house for mendicants.	Napoleon I, King of Italy.	1810, Nov. 14	495,039.04	do	74,409.02	110,958.78	Received 764 persons in 1881.
Orphanage "Il Bigallo."	Refuge for orphans of both sexes from 3 to 10 up to 18 years.	Fra Pietro of Verona	1244	3,367,818.77	do	74,285.40	62,926.10	Received 890 children in 1881.
Hospice S. Onofrio	Sleeping beds for sixty old men.	The college of S. Onofrio.	1500		do	74,285.40	2,936.34	In connection with the orphanage "Il Bigallo."
Pia Casa Catecumeni	The instruction of proselytes.	Frate Alberto Leoni	1636, June 14		do	74,285.40	526.07	In connection with the orphanage "Il Bigallo" since 1810.
Hospice S. Agnese	The hospitality of six old and poor widows and subsidies.	Filippo di Gardo	1403, July 10		do	74,285.40	1,236.07	In connection with the orphanage "Il Bigallo" since 1799.
Hospice S. Domenico	The hospitality of three poor widows, inhabiting each a floor of the building.	Livia Gualberti	1694, Feb. 20	8,691.11	do	74,285.40	1,236.07	In connection with the orphanage "Il Bigallo" since 1833.

Statement of endowed charitable institutions in Florence—Continued.

Institutions.	Object.	By whom established.	When established.	Capital.	By whom managed.	Yearly expensis for—		Remarks.
						Administration.	Charitable purposes.	
Orphanage S. Filippo Neri.	Refuge and instruction of poor orphans under 18 years of age.	Don Filippo Frami ...	1650, Nov. 1...	454, 351. 92	A superintendent.	9, 988. 25	19, 496. 00	
Congregation of S. Gioanni Battista.	Subsidies (clothing and food).	Cosimo III, Grand Duke.	1700..........	608, 437. 86	Government officers.	8, 100. 65	22, 878. 00	
Arciconfraternita Misericordia.	The carriage of sick persons or dead bodies.	Piero di Luca Borsi...	1240..........	636, 017. 89	A purveyor....	5, 802. 15	35, 766. 21	
Congregation Buonomini di S. Martino.	The relief of poor of civil condition.	S. Antonio, Bishop of Florence.	1441..........	685, 150. 95	Twelve counselors.	5, 265. 84	22, 119. 87	
Home of refuge S. Ambrogio.	The relief of young girls.	....	1813..........	335, 579. 66	A government officer.	....	....	

ADULTERATION OF WINES IN FRANCE.

TRANSLATED FROM LA GIRONDE, OF MARCH 27, 1883, OF BORDEAUX, BY CONSUL ROOSEVELT.

One knows the importance of the movement undertaken more or less everywhere against the municipal laboratory of the city of Paris.

The matter came before the Chamber of Commerce of Paris; having, after the discussion, been sent back to be examined by a commission, it gave rise to a report which the Chamber of Commerce has just discussed and adopted in its sitting of February 21; that document borrows a peculiar authority from the name of the reporting member, M. Jarlauld, the president, as one knows, of the syndicate of wholesale wines and spirits in Paris. The following are the principal features of it:

> M. Jarlauld first admits that the municipal laboratory renders incontestable services to the Parisian consumption, but it is questionable if the laboratory does not overstep its power when, of its own authority, it fixes averages notably superior to those admitted by the most competent chemists, and which are a maximum, and when it gives its bulletins a monthly publicity which, in the abstract form in which it is produced, throws discredit and disrepute on our pre-eminent national produce.
>
> The reporter of the Chamber of Commerce says that he pointed out to the *Garde des Sceaux* the gross error which the laboratory committed by enacting an inflexible figure below which any blending makes its author liable to be tried before the court of misdemeanors. To exact from a merchant that the wine which he delivers to the retail dealer should have a minimum of 12 degrees of alcohol and 24 grams of dry extract is to take no consideration of the reality of things, namely, of the French harvest, the average of which has only 19.9 grams; it is to decide that, whatever may be the circumstances, whether the season be dry or rainy, whether the wine of such a year be rich or poor in alcohol or in extract, the merchant shall be held, under penalty of fine or imprisonment, to blend his wines so as to deliver so many degrees and so many extractive matters; it is to compel commerce, if such a theory could be admitted, to have no preference as it did hitherto, of either the fruit, taste, or the boquet, or the flavor, all so dear to the French consumer, and to have no longer an aim, but to find abroad strong wines (vins corsés) filling the conditions imposed by the laboratory.
>
> How, in fact, in the hypothesis of 24 grams and 12 degrees compulsory are we to think any more of the wines of our country, generally so weak in alcohol and in extract, and which, occasionally, as in 1882, went down in some vineyards of the center to 4 and even to 3 degrees of alcohol, and in some wines of the south to 7 and 8 degrees?

The reporter proves by several instances of operations that the dry extract and the alcohol have only a relative value. He had to declare, then, to the minister of justice, that the average of the laboratory should not be established as a scientific dogma, and that, wishing to make it accepted as an axiom of jurisprudence, would be to expose the most honest merchants to an undeserved conviction.

Passing to the monthly and repeated publicity given by the laboratory to its analyses, a publicity, which, on account of its incomplete form, gives way to commentaries as regrettable as erroneous, Mr. Jarlauld shows forth that during the year 1881 the laboratory analyzed 3,361 samples of wines, which it classed as follows:

Good	357
Tolerable	1,093
Bad, not hurtful	1,709
Bad, hurtful	202

On 36 samples of alcohol, it found—

Good	11
Tolerable	9
Bad	16

And on 33 samples of "liqueurs," which were submitted to it, it found—

Good	14
Bad	12
Adulterated	7

On those admissions, really too succinct, several American consuls residing in our sea-ports, and a number of foreign papers took up the subject and forcibly declared that the great majority of the wines and spirits of France were adulterated, the statement being authenticated by the French administration, and that it is expedient to prevent the importation of the said wines into their countries.

In short, and as a double conclusion, the Chamber of Commerce of Paris calls the attention of the minister of commerce to the following:

1. That the average created by the laboratory, viz, 12 degrees alcohol and 24 grams dry extract for blended wines is arbitrary, and represents a maximum rather than an average.
2. That if the operations of the municipal laboratory offer serious advantages to the Parisian population, per contra, its publicity, unless it be reformed in its statistical form, presents grave inconveniences to which it is expedient to put an end, if we do not wish to loose our renown as the first wine-growing nation in the world, and to see, as a consequence, the already reduced figure of our exportations still more reduced.

[Translated from La Gironde, of March 30, 1883.]

CARCASSONNE, *March* 18.

The vine-growers of the department of Aude have just addressed by the organ of the Central Society of Agriculture of Carcassonne, a petition to the minister of agriculture.

The said society strongly complains of the adulteration of wines which is made in our region on a very wide scale, and of course at the expense of the vine-dressers and consumers.

It ends in asking the severe repression of that fraud.

ADULTERATION OF FRENCH WINES.

REPORT BY CONSUL ROOSEVELT, OF BORDEAUX.

I have the honor to transmit herewith a translation of an article which was published in the Journal des Debats, of Paris, March 22, 1883, on the adulteration of wines.

GEO. W. ROOSEVELT,
Consul.

UNITED STATES CONSULATE,
Bordeaux, *April*, 23, 1883.

THE ADULTERATION OF WINES.

[From the Journal des Debats, of March 22, 1883.]

The art of falsifying articles of food constantly increases and follows the progress of civilization; there seems to be an inclination to adulterate wine, beer, milk, &c., and even water! By the present, one may be able to form an idea of what the future will be. What in the end shall we eat and drink in the year of our Lord 1900?

There has been established at Paris since a few years, a municipal laboratory for the purpose of examining samples of different products, officially taken from dealers, and of analyzing the goods which are brought directly by the public. Each examination costs 7 francs 49 centimes, but a simple trial 1 franc 25 centimes; more than two-thirds of the analyses are gratuitously made. The laboratory thus costs the city a considerable amount of money, but the health of the inhabitants is well worth that surplus of expense.

It is incontestable that the creation of the laboratory has already exercised an influence on the improvement of commercial articles. It does not seem void of interest to review summarily the principal adulterations:

That which is most falsified is the wine. We will commence then with the wine: From 1871 to 1881 the average production of wine was 49,193,000 hectoliters per year; the highest year, 1875, gave 83,836,000 hectoliters; the lowest, 1879, only 25,770,000 hectoliters. The importation reached its maximum in 1880, representing 7,219,000 hectoliters; the exportation, which from 1871 to 1877 always averaged at least 3,000,000 hectoliters, fell in 1880 to 2,488,000 hectoliters. In spite of the falling off in the production, the price of wine remained nearly stationary; the producer has maintained his tariff, but, of course, has falsified; he has increased the quantity at the expense of the quality.

Wine begins to be adulterated from the moment that it is put in the vat, in order to clarify and preserve it. To the racking, followed by filtering, is now almost always added the sizing with albumen, gelatine, blood, or even milk. These matters combine with the tannin and precipitate it; that treatment is good for harsh wines; it is useless and hurtful to finer wines. Sometimes, on the contrary, tannin is not in sufficient quantity; then a decoction of oak-gall or ground grape seeds are added.

Frequently, which is expressly forbidden, a little alum is mixed with it in order to give it a piquant taste.

The municipal laboratory has proportioned 5 and 6 grams of that toxic substance. In the south and in Spain, wine is plastered and salted. Plaster is believed to better wine by taking away part of its tartaric acid; salt hastens the clarification and prevents wine from turning.

The vine-grower thus gains time and takes precaution against the disease of the wine. But plastered wine has a somewhat bitter taste, and is indigestible just the same as selenitic water; evidently the long use of a strongly plastered wine will, in time, produce affection of the kidneys and the bladder. The sanitary committee of the army rejected from consumption any wine containing more than 2 grams of sulphate of lime per liter. By the by, one should be cautioned against sulphate of baryta which is now beginning to be used as a substitute for plaster.

Wine tends to ferment; in order to prevent the transformation of its sugar into alcohol it is sulphured, which is lawful; it may also be alcoholized; but unfortunately the alcohols used are cheap ones, which are most frequently hurtful; use is also made of salicylic acid, a substance absolutely forbidden now; such are, briefly, the operations to which wine is submitted during its making; let us see now the modifications made to it before delivering it for consumption.

It is blended, that is to say, that several kinds are mixed together in order to make a mean average agreeing with the wines adopted as standards. It is wetted and it is adulterated by the introduction of litharge (oxide of lead) to check the sourness; alcohol from grain to increase its alcoholic proportion; fuchsina, which sometimes contains arsenic; sulphuric and tartaric acids to heighten the hue and sour the taste; lastly, the coloring matters: cochineal, orchil, and especially salts of aniline.

The proportion of alcohol in wines is variable; varying from 7 per cent. in volume to 20 per cent. (Marsala) and 27 per cent. (white Sicilian). The white wines of Alsace have an average of 10.22; the white wines of Germany, 9.75; the wines of Switzerland, 9.50; the Bordeaux clarets have a proportion of 10 to 11 and 12 per cent.; the wines of the south, 13 to 14 and 15; those of the Rhine, 10 and 11. As is seen, adulteration has, on that ground, an open field.

The dry extracts of wine also change according to the vineyard; it is then very difficult for the chemist to form an opinion on the value of a wine by considering only its proportion of alcohol and its dry extract.

French wines of to-day are generally blended. They are blended with coarse foreign wines, rich in alcohol and coloring matters.

The coarse wines of Spain and Italy are blended, wetted, and worked in all ways. Blending is a lawful operation because it permits the utilizing of wines of inferior qualities which could not be drunk otherwise; but wetting is an essentially fradulent operation; selling water for wine is nothing else than a fraud; besides, the operation leads to the employment of irrelevant coloring substances, and in order to increase the alcoholic proportion, to add water of inferior quality, often contaminated by potato alcohol. The bouquet and flavor are given by means of ether and manufactured essences, always harmful to health.

We leave aside the small vines ("piquettes") made of dry fruits, to which are added tartar, tannin, glycerine, &c.

Wetting causes the treasury to lose a considerable amount, without mentioning the loss to public health. If wine is wetted only in the proportion of 8 per cent. (the yearly consumption of Paris being about 5,000,000 hectoliters) the added water is 415,000 hectoliters. The duty on the hectoliter being 18 francs, 87 centimes, the loss is then 7,831,050 francs; which is 3,423,750 francs for the Government and 4,407,300 for the city.

At the Paris laboratory they admit as a basis for wine of an ordinary kind, as *bona fide* salable wine, any blended wine having 10 per cent. alcoholic proportion and 20 grams dry extract per liter. This still leaves a certain margin for wetting, but, reciprocally, certain natural wines are less rich. One, then, could not be too cautious in such a matter, and should take great care not to draw absolute conclusions from the analysis. So, the public assistance lately caused wines of the south to be analyzed, under the name of blendings. The laboratory answered "wetted wine," because that wine did not reach the average of the 10 per cent. alcohol and 20 grams dry extract. The merchant, on the other hand, said: "I sold you not blended wine, but wine from Hérault." "Then the wine is in nature," replies the laboratory.* The essays, interpreted in an absolute sense, might mislead.

It is, indeed, easy to deliver excellent Bordeaux claret with 18 and 22 grams of dry extract and 10 degrees alcohol, and also to deliver detestable wine having 14 to 15 degrees and 25 to 35 grams extract. One should evidently, here, take analysis as a verification, but not to draw from it formal conclusions.

Anyhow, out of 3,361 samples, in 1881, the laboratory declared 387 good, 1,093 tolerable, 1,709 bad, not hurtful, 202 hurtful; which is 10.63 per cent. good, 32.50 per cent. tolerable, 50.84 per cent. bad, not hurtful, 6.01 per cent. hurtful. That proportion is considerable, but one should not lose sight of this fact that is based on almost unlimited numbers: 3,361 samples! That figure might have greatly increased without any obvious increase of the adulterated samples. The samples suspected of being bad have, of course, been picked. It would then be erroneous to deduct from it that such, in fact, is the real proportions of bad wines in Paris. There is a mirage against which it is well to guard the public. We do not exactly know the exact proportion. We do not any better know it for foreign wines, and if, for the welfare of the consumer, one publishes figures, it would be just, in the interest of the producer, to point out that the proportion advertised is only fictitious. In fact, foreigners abroad should not imagine that French wines are the worst in the world.

Incorrect ideas are thus spread. The Times generously estimates that 6¼ per cent. of the French wines are drinkable. And at London, if you please, at Madrid, Valencia, Alicante, Barcelona, Genoa, Naples, Rome, if samples were also picked, what would the Paris laboratory say? We see the fraud; it is already sufficient, but we will not exaggerate it for pleasure.

The adulterations of alcohols consist in mixing alcohols from grain, beet root, potato, fecula with artificial flavorings. Artificial essences may contain principles which have an unfavorable action on man's organization. The production of wine alcohols has fallen, between 1875 and 1881, from 350,000 hectoliters to 27,062. The production of alcohols from grain and amylaceous substances has risen during the same period from 100,000 hectoliters to 262,034. Consumption reached 1,553,540 hectoliters pure alcohol. The laboratory found, in 1881, out of 35 samples, 11 good (30 per cent.), 9 tolerable (25 per cent.), 15 bad (44.45 per cent.).

TAXATION IN GERMANY.

REPORT BY CONSUL SMITH, OF MANNHEIM.

At this time, when the taxation of Germany is in quick transition from the separate Government of the States to the unity of the empire, it is interesting to observe the primary movements of the Government of Prussia, which in some measure foreshadows the future course of the Imperial Government.

In many states the system of taxation is already the same as that of Prussia, and other states are approximating to it, consequently the Prussian system will furnish a good idea of the future mode of taxation of the empire.

---

*Report on the working of the municipal laboratory, presented to the chamber of commerce by Mr. F. Jarlaud.

In Prussia the tax called "Klassen-Steuer" or classed tax is levied on every person whose income does not exceed 3,000 marks. Except—

(*a.*) All persons whose income is less than 420 marks.

(*b.*) All persons who are not sixteen years of age, and whose annual income does not exceed 660 marks.

(*c.*) Members of the army.

(*d.*) Foreigners during their first year of residence, except those who carry on a trade, do business, or practice their professions.

(*e.*) Owners of the iron cross and other military distinction.

(*f.*) Those who took part in the wars of 1806 and 1815.

(*g.*) Minors yet under the control of their parents and supported by them.

In Prussia the amount of this tax is about 42,000,000 marks. It is divided into twelve classes and paid annually, according to the annual income, as follows:

Annual tax.

Classes.	Income.	Tax.
	Marks.	*Marks.*
1	420 to 660	3
2	660 to 900	6
3	900 to 1,050	9
4	1,050 to 1,200	12
5	1,200 to 1,350	18
6	1,350 to 1,500	24
7	1,500 to 1,650	30
8	1,650 to 1,800	36
9	1,800 to 2,100	42
10	2,100 to 2,400	48
11	2,400 to 2,700	60
12	2,700 to 3,000	72

Taxes are levied according to households. Members of the household who are paid for their services, or who pay for their board, are also subject to payment of this tax.

In order to secure the proper application of the law great care is taken in estimating the annual income of the inhabitants. This estimate is made by a committee of the local Board of Aldermen who are bound by oath to honestly perform their duties. The committee generally consists of three members for municipalities of 3,000 inhabitants; six members for municipalities of 6,000 inhabitants; nine members for municipalities of 10,000 inhabitants; twelve members for municipalities of more than 10,000 inhabitants.

Tax on annual incomes exceeding 3,000 marks is levied on all persons receiving an income greater than that sum, and foreigners who carry on trade, manufacture, and who do business, excepting the members of the royal house of the princely families of Hohenzolern, of the royal family of Hanover, of the family of the Prince-Elector of Kurhessen, of the family of the Duke of Nassau. Exempt from this tax are:

(1.) The military: Salary and perquisites of the members of the army.

(2.) That part of the income which originates in estates in a foreign country, if it can be shown that the tax is already paid in the foreign country.

Members of the diplomatic and consular corps are exempted from the payment of taxes, their taxes being regulated by existing international treaties.

It is levied as follows:

Classes.	Income.	Annual tax.
	Marks.	*Marks.*
1	3,000 to 3,600	90
2	3,600 to 4,200	108
3	4,200 to 4,800	126
4	4,800 to 5,400	144
5	5,400 to 6,000	162
6	6,000 to 7,200	180
7	7,200 to 8,400	216
8	8,400 to 9,600	252
9	9,600 to 10,800	288
10	10,800 to 12,000	324
11	12,000 to 14,400	360
12	14,400 to 16,800	432
13	16,800 to 19,200	504
14	19,200 to 21,600	576
15	21,600 to 25,200	648
16	25,200 to 28,800	756
17	28,800 to 32,400	864
18	32,400 to 36,000	972
19	36,000 to 42,000	1,080
20	42,000 to 48,000	1,260
21	48,000 to 54,000	1,440
22	54,000 to 60,000	1,620
23	60,000 to 72,000	1,800
24	72,000 to 84,000	2,160
25	84,000 to 96,000	2,520
26	96,000 to 108,000	2,880
27	108,000 to 120,000	3,240
28	120,000 to 144,000	3,600
29	144,000 to 168,000	4,320
30	168,000 to 204,000	5,040
31	204,000 to 240,000	6,120
32	240,000 to 300,000	7,200
33	300,000 to 360,000	9,000
34	360,000 to 420,000	10,800
35	420,000 to 480,000	12,600
36	480,000 to 540,000	14,400
37	540,000 to 600,000	16,200
38	600,000 to 660,000	18,000
39	660,000 to 720,000	19,800
40	720,000 to 780,000	21,600

And so on, always rising 60,000 marks, and the tax 1,800 marks each.

The income tax is levied on the income derived from—

1st. Real estate.

2d. Capital.

3d. Trade, business, or from any paying profession.

The estimate of the annual income and of the tax is made by a committee, the chairman of which is a Government officer; one-third of the members are members of the Board of Aldermen or of the circuit deputies; the rest are taken from the inhabitants of the town or circuit, who must be income tax-payers. Every tax-payer is notified of the tax to be paid by him by a special notice from the committee.

Two months' time is given for remonstrance on the part of the taxpayer. This tax must be paid by monthly installments payable at the beginning of the month, or prepayment for the year can be made.

In case the taxes are not paid within the proper time, the tax-payer receives a special rescript requiring payment. If he does not pay within three days from notice, an execution is taken against him. In order to regulate the action and decisions of the committee, the minister of finance appoints one special commissioner for each district in the provinces. This commissioner presides over a commission consisting, two-thirds of income tax-payers and one-third of klassen tax-payers of the district. This commission is called the Bezirks commission, or district commission. Its duty is to hear all complaints of tax-payers and rectify all errors of the tax committee.

Gewerbe-Steur (trade-tax) is levied on—

(1.) Commerce.
(2.) Hotels, restaurants, and innkeepers.
(3.) Manufactures and trades employing a number of persons.
(4.) Mill industry.
(5.) Navigation, freight establishments, livery stables, &c.
(6.) Peddlers.

These are divided into three classes: A-I, A-II, and B.

1st. A-I includes large manufacturing and commercial establishments of commission and shipping. (Agents of insurance companies are free from this tax.) Banking, exchange, insurance companies, shipping establishments, and all establishments based on commercial or money transactions, circulating libraries, mill, baking, butchering, brewing establishments, and all others where the capital employed is large and the business is important.

2d. A-II includes smaller establishments of the same kind as A-I.

3d. B includes business establishments of the least important class, including dealers in fruit, vegetables, &c., unless their business is quite important.

Foreign insurance companies possessing an establishment and officers with general agent in Prussia are subject to taxation.

Exempt from this tax are:

(1.) Die Köningliche Seehandlung and all industrial establishments belonging to the state.
(2.) Foreigners during their visits at fairs, &c.
(3.) Foreign purchasers of domestic productions.
(4.) Agents of insurance companies.
(5.) Authors who sell only their own publications.
(6.) Persons who do literary work for others.
(7.) Dentists.
(8.) Barbers.
(9.) Persons who have rented bridge tolls.
(10.) Distillers of brandy.
(11.) Persons who are engaged in making discoveries of amber on their own estate.
(12.) Farmers who sell self-baked bread on market days.

Class IV includes small tradesmen who employ more than one assistant and an apprentice, and the mill industry. Only men who have technical ability are considered assistants.

Mere physical strength is not accepted under the title of "tradesman."

R includes freight and livery establishments and navigation.

In order to ascertain the amount of taxes, four departments have been created within the Prussian Government, according to its wealth and industry, yet for the taxes under A-I only two departments exist. First, the Government districts, Aix-la-Chapelle, Arnsberg, Breslau, Cologne, Danzig, Düsseldorf, Konigsberg, Liegnitz, Magdeburg, Merseberg, Potsdam, Stettin, and the city of Berlin.

The other Government districts belong to the second department. The first department includes some of the largest cities; the second includes cities of medium size; the third, all other cities of about 1,500 inhabitants and more, and one-fourth of the flat countries and all towns not belonging to one of the three previous departments.

In order to estimate the amount of tax to be levied it is customary to suppose a medium tax; thus, if there are 80 tax-payers in one class, and the medium is found to be 30 marks, the amount of the tax will be

2,400 marks. In case the tax-payer is not able to pay the medium tax, a lower rate is granted him and the sum is added to the taxes of other rate payers. Medium taxes are levied on—

(*a.*) Commercial pursuits.
(*b.*) Hotels, restaurants, and inn-keepers.
(*c.*) Tradesmen.

The rates are levied—

I.—COMMERCE.

CLASS A-I.

a. MEDIUM RATE.

(1.) First department, 288 marks annually, or 24 marks monthly.
(2.) Second department, 216 marks annually, or 18 marks monthly.

b. LOWEST RATE.

The lowest rate in both departments, 144 marks annually, or 12 marks monthly.

By a special royal decree the medium tax can be reduced to 144 marks, and the lowest tax to 72 marks.

CLASS A-II.

a. MEDIUM RATE.

(1.) First department, 72 marks annually, or 6 marks monthly.
(2.) Second department, 48 marks annually, or 4 marks monthly.
(3.) Third and fourth departments, 30 marks annually, or 2.50 marks monthly.

b. LOWEST RATE.

(1.) First department, 36 marks annually; or 3 marks monthly.
(2.) Second department, 24 marks annually, or 2 marks monthly.
(3.) Third and fourth departments, 18 marks annually, or 1.50 marks monthly.

The rates rise from 18 to 24, 30, 36, 42, 48, 54, 60, 72, 84, 90, 96, 108, 126, 144, 156, 168, 180, and upwards (each time for the amount of 36 marks), according to the importance of the transactions.

CLASS B.

a. MEDIUM RATE.

(1.) First department, 24 marks annually, or 2 marks monthly.
(2.) Second department, 18 marks annually, or 1.50 marks monthly.
(3.) Third department, 12 marks annually, or 1 mark monthly.
(4.) Fourth department, 6 marks annually, or .50 mark monthly.

b. LOWEST RATE.

(1.) In the three departments, 6 marks annually, or 50 pfennigs monthly.
(2.) In the fourth department, 3 marks annually, or 25 pfennigs monthly.

The rates rise, according to the importance of the transactions, up to 6, 12, 15, 18, 21, 24, 36, 54, 72, 90, 108, 144 marks, and upwards, each time for 36 marks.

II.—HOTELS, RESTAURANTS, AND INN-KEEPERS.

CLASS C.

a. MEDIUM RATE.

(1.) First department, 54 marks annually, or 4.50 marks monthly.
(2.) Second department, 36 marks annually, or 3 marks monthly.
(3.) Third department, 24 marks annually, or 2 marks monthly.
(4.) Fourth department, 12 marks annually, or 1 mark monthly.

b. LOWEST RATE.

(1.) First and second departments, 12 marks annually, or 1 mark monthly.
(2.) Third and fourth departments, 6 marks annually, or 50 pfennigs monthly.
The rates above 6 marks rise in the same way as in Class B.

III.—TRADE.

CLASS II.

a. MEDIUM RATE.

(1.) First department, 24 marks annually, or 2 marks monthly.
(2.) Second department, 18 marks annually, or 1.50 marks monthly.
(3.) Third and fourth departments, 12 marks annually, or 1 mark monthly.

b. LOWEST RATE.

(1.) First department, 12 marks annually, or 1 mark monthly.
(2.) In the three other departments, 6 marks annually, or 50 pfennigs monthly.
The rates rise in the same way as in Class B.
In certain cases exemption from the tax is granted, especially to poor tradespeople.

IV.—NAVIGATION, FREIGHT, AND LIVERY BUSINESS.

A.—*Navigation.*

Ships of the following measure.

(1 last = 32.9769 hectoliters.)

Measures.	Marks.
3 to 6 lasten, pay	2
7 to 12 lasten	4
13 to 18 lasten	6
19 to 24 lasten	8

Steamboats on rivers, &c., are taxed according to their machinery, 75 pfennigs each horse-power annually.

Navigation on the coasts, oceans, &c., is taxed as commerce (A-I).

Freight and Livery-stables.

People engaged in the freight and livery-stable business, who keep two horses and more, pay 3 marks annually for each horse.

Miscellaneous.

Peddlers pay an annual tax of 48 marks. The secretary of the treasury has the right to commute this tax to 36, 24, 18, and 6 marks in particular cases; for instance, when the peddler is deformed. He has also the power to raise the tax to 72, 96, and 144 marks for circus companies, actors, &c.

In order to control this system of taxation, each municipality has to present a list with the names and professions of the inhabitants indicating such cases as are subject to the tax.

Those inhabitants who are subject to taxes in Classes A-I, A-II, and C, must be present during the allotment of the rate of tax.

The Government makes out a list of all establishments which it thinks fit to tax, and submits this list to the current authorities.

The tax-payers elect seven members from their numbers in order to form a committee on the rates of transaction. Their deliberations are presided over by a special commissioner of the Government.

Tax-payers have the right to remonstrate against the rate of taxation allotted to them within three months after they have received the inspector's list.

GRUNDSTEUR—TAXES ON LANDED PROPERTY, REAL ESTATE, ETC.

According to the law of May 21, 1861, the "Grundsteur" is divided as follows:

(1.) Tax on houses and court-yards, gardens, &c., belonging to them. This tax is generally called "Gebaude-steur" (house-tax).

(2.) The "Grundsteur" proper, *i. e.*, the tax on landed estates, farms, &c.

In Prussia, the annual amount of the "Grundsteur" is, according to the above law of 1861, 30,000,000 marks, namely—

		Marks.
1.	Province of Prussia	3,990,128.20
2.	Province of Posen	2,179,101.51
3.	Province of Pomerania	1,856,351.85
4.	Province of Silesia	4,904,700.86
5.	Province of Brandenburg	2,999,919.69
6.	Province of Saxony	4,926,162.26
7.	Neurorpommern and Rügen	620,484,21
8.	Oberlansitz	312,630.37
9.	Niederlansitz	332,210.23
10.	Province of Westphalia	2,883,693.63
11.	Province of Rhinelands (according to the decree of 1864)	4,994,617.19
12.	Province of Schleswig-Holstein	3,245,992.35
13.	Province of Hanover	4,335,169.78
14.	Province of Hesse-Nassau	1,994,749.81
15.	District Meisenheim	24,058.06

The amount of this tax can be raised or reduced only according to the general financial state of the monarchy.

The provinces distribute the amounts to be raised by them among their districts, according to their respective ability and wealth.

Exempt from the "Grundsteur" are:

(1.) Property of the State.

(2.) Property of those princes and counts who formerly were independent of the empire. (Law of 1820.)

(3.) Property belonging to and being in *general use* by the provinces, districts, municipalities, &c.

(4.) Bridges, high roads, canals, and railways.

(5.) Property which at the time of the issue of this law was already in possession of the Protestant or the Roman Catholic Church; and property rents of which are used for schools, charity establishments, &c.

(6.) Real estate in possession of the empire.

In order to secure the working of the law every municipality is bound to keep a book (called "Flurbuch") which contains all particulars referring to the extension and the ownership of every property within its limits.

The taxes, if not prepaid for the whole year, must be paid by monthly installments.

GEBÄUDE-STEUER (HOUSE-TAX).

All houses with yards and gardens not exceeding the extension of 25 are (53 square meters) are subject to this tax.

More extensive ones are subject to the "Grund-steur".

Exempt from it are:

(1.) Edifices belonging to the royal family and to all princes and counts formerly independent of the Empire.

(2.) Edifices belonging to the state, provinces, &c., used for public purposes.

(3.) University and school buildings.

(4.) Churches, chapels, &c.

(5.) The habitations of the clergy.

(6.) Hospitals, orphan houses, &c.

(7.) Such buildings as are necessary to farming purposes.

(8.) Water buildings.

The annual amount of the tax is for—

(1.) Houses designed for habitation, shops, ateliers, theaters, &c., 4 per cent. of the estimated annual value.

(2.) Factories and all buildings designed for the carrying on trade, breweries, distilleries, forges, mills, buildings designed for purposes of agriculture, stables, &c., 2 per cent. of the estimated annual value. The amount of the tax is assessed by a committee whose members are elected by the board of aldermen, and whose deliberations are presided over by a special commissioner of the Government. The system of taxation is subject to a revision every fifteenth year.

KOMMUNAL (MUNICIPAL TAXES).

The respective dispositions are contained in the municipal and town ordinances.

The income from that part of the property being outside of the town limits cannot be taken into account.

The consent of the Government is necessary for—

(*a*.) All additions to the income tax.

(*b*.) All additions to the other direct taxes, if the addition exceeds 50 per cent.

(*c*.) All additions on indirect taxes.

Special municipal taxes may be assessed, but only by consent of the Government.

The laws regulating the same subject in the other provinces contain the same principles in about the same form.

The general principal of municipal taxation is as follows:

According to the municipal constitutional laws the municipal budget may be provided for—

(1.) By additions to the state taxes.

(2.) By special direct or indirect municipal taxes.

The first-named taxation forms the rule, and has been designated several times by the secretary of the treasury as being the best mode of municipal taxation.

Additions are especially levied on—

(*a.*) Klassen and income tax.

(*b.*) Taxes on trades, with the exception of the tax on peddlers, which trade cannot be taxed by the municipalities.

(*c.*) Ground and house tax.

There exists no uniform legislation for municipal taxation in cities, towns, or villages.

Town ordinances for the provinces of Prussia, Posen, Pomerania, Silesia, Brandenburg, and Saxony state that it is the duty of every inhabitant to contribute to the town budget. Where the municipal tax is levied in the form of an addition to the class tax it is only paid by those subject to the class tax.

When the income of the town is not sufficient to pay the expenses of the municipality, then the aldermen possess the right to assess municipal taxes—

1st. By an addition to the state tax.

2d. In case of addition to the income tax the income from property outside of the town limits cannot be assessed.

3d. The consent of the Government is necessary for all additions to the income tax and all other direct taxes if the addition exceeds 50 per cent., and for all additions on direct taxes.

The increase of the municipal budget, when neccessity occurs through the increase of the state tax, forms the rule, and has been designated by the secretary of the treasury as the best mode of municipal taxation rather than by special direct taxation.

It is generally added to Klassen or income tax.

TAX ON TRADES.

Ground and house tax.

In some towns, by Government decree, the municipal tax is fixed as follows:

Annual income of—	Annual tax, in marks.
300 to 450 marks	6
450 to 600	9
600 to 750	12
750 to 900	15
900 to 1,050	18
1,050 to 1,200	24
1,200 to 1,500	30
1,500 to 1,950	36
1,950 to 2,400	48
2,400 to 2,700	60
2,700 to 3,000	72

An annual income of more than 3,000 marks is assessed by the state tax. This assessment is made by a committee of eight members elected by the board of aldermen.

In towns, cities, &c., where the "Mahl and Schlachtsteuer" (tax on butchering and grinding), abolished on January 18, 1875, existed as a municipal tax, the "Schlachtsteuer" (tax on butchering) may yet be levied as a municipal tax as the requirements of the municipal budget demands its continuation.

Exempt from municipal taxation are:

(*a*.) Public endowments maintained by the state, namely, pensions of widows.

(*b*.) Retired officers and officials.

(*c*.) Officers, &c., of the army.

(*d*.) Clergymen and teachers of elementary schools.

The salary of Government officials can only be taxed one-half of its amount. The Klassen and income tax of Prussia do not vary much during different years. The following list, taken from Professor Soetbeer's work, "People's income in Prussia," gives this exhibit:

Classes.	Income.	Taxpayers.	
		Absolute numbers.	Per cent. of the whole number of tax payers.
	Marks.		
1	420 to 660	2,662,104	50.38
2	660 to 600	1,078,771	20.80
3	900 to 1,050	360,657	6.82
4	1,050 to 1,200	295,678	5.60
5	1,200 to 1,350	179,367	3.40
6	1,350 to 1,500	137,700	2.61
7	1,500 to 1,650	82,556	1.55
8	1,650 to 1,800	81,630	1.54
9	1,800 to 2,100	64,565	1.22
10	2,100 to 2,400	66,217	1.25
11	2,400 to 2,700	40,524	0.77
12	2,700 to 3,000	46,786	0.89
1-2 Klassensteuer		5,116,555	96.83

Classes.	Income.	Taxes.		Amount of taxes produced.
	Marks.	*Per cent.*	*Marks.*	*Marks.*
1	420 to 660	0.72	3	7,986,312
2	660 to 900	0.91	6	6,592,626
3	900 to 1,050	1.00	9	3,245,913
4	1,050 to 1,200	1.14	12	3,548,136
5	1,200 to 1,350	1.50	18	3,228,606
6	1,350 to 1,500	1.77	24	3,304,800
7	1,500 to 1,650	2.00	30	2,476,680
8	1,650 to 1,800	2.18	36	2,938,680
9	1,800 to 2,100	2.33	42	2,711,730
10	2,100 to 2,400	2.29	48	3,178,416
11	2,400 to 2,700	2.50	60	2,431,44
12	2,700 to 3,000	2.67	72	3,368,592
Total				45,011,931

Classes.	Income.	Taxpayers.	
		Absolute numbers.	Per cent. of the whole number of taxpayers.
	Marks.		
1	3, 000 to 3, 600	50, 743	0. 78
2	3, 600 to 4, 200	27, 124	0. 51
3	4, 200 to 4, 800	19, 302	0. 36
4	4, 800 to 5, 400	13, 813	0. 26
5	5, 400 to 6, 000	10, 085	0. 19
6	6, 000 to 7, 200	11, 987	0. 22
7	7, 200 to 8, 400	7, 514	0. 14
8	8, 400 to 9, 600	5, 849	0. 11
9	9, 600 to 10, 800	3, 813	0. 07
10	10, 800 to 12, 000	3, 216	0. 06
11	12, 000 to 14, 400	3, 173	0. 06
12	14, 400 to 16, 800	2, 522	0. 05
13	16, 800 to 19, 200	1, 490	0. 03
14	19, 200 to 21, 600	1, 340	0. 02
15	21, 600 to 25, 200	1, 187	0. 02
16	25, 200 to 28, 800	742	0. 04
17	28, 800 to 32, 400	662	0. 02
18	32, 400 to 36, 000	484	0. 01
1-18 Income taxes		163, 024	3. 12

Classes.	Income.	Taxes.		Amount of taxes produced.
	Marks.	*Per cent.*	*Marks.*	*Marks.*
1	3, 000 to 3, 600	3	90	4, 542, 534
2	3, 600 to 4, 200	3	108	2, 929, 392
3	4, 200 to 4, 800	3	126	2, 432, 556
4	4, 800 to 5, 400	3	144	1, 989, 072
5	5, 400 to 6, 000	3	162	1, 633, 770
6	6, 000 to 7, 200	3	180	2, 157, 660
7	7, 200 to 8, 400	3	216	1, 623, 024
8	8, 400 to 9, 600	3	252	1, 473, 948
9	9, 600 to 10, 800	3	288	1, 078, 144
10	10, 800 to 12, 000	3	324	1, 041, 984
11	12, 000 to 14, 400	3	360	1, 142, 280
12	14, 400 to 16, 800	3	432	1, 089, 504
13	16, 800 to 19, 200	3	504	750, 960
14	19, 200 to 21, 600	3	576	756, 864
15	1, 600 to 25, 200	3	648	769, 176
16	25, 200 to 28, 800	3	756	560, 952
17	28, 800 to 32, 400	3	864	571, 968
18	32, 400 to 36, 000	3	972	470, 448
Total				27, 034, 236

The figures referring to the "Klassensteuer" show that the number of tax-payers whose income is estimated at from 420 marks to 1,500 marks annually is 4,734,277 or 89.01 per cent. of the whole number of the inhabitants subject to this class of taxation. They pay the largest part of the tax, *i. e.*, 27,906,393 marks.

The figures of the "income tax" show that the lowest class of tax-payers (whose income varies between 3,000 marks to 6,000 marks annually) number 121,071, and, consequently in the majority, pay the largest part of the tax, *i. e.*, 13,527,324 marks.

Regarding "communal taxes" ("Kommunul Steuer") it has been already stated that the communities provide for the expense of this budget, as the income from their property does not suffice by addition to the state income tax.

It has been observed, and it is the cause of bitter complaint, that this system is an unjust one. The state tax in itself is not large; but additions for municipal purposes make it in many parts of Germany burdensome.

Product of the direct State taxes and the communal taxes and the money expences of the communities for primary schools in Prussia.

Cities.	Population, 1875.	Direct State taxes, 1876, Klassen-Steuer.	Direct State taxes, 1876, income tax.	Ground and house tax.	Trade tax.	Total.	Communal taxes, 1876.					Expenses of the municipalities for public schools—1876.
							Personal tax.	State tax.	Monthly additions to the State tax.	Other direct and indirect taxes.	Total.	
		Marks.	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*
Berlin	966, 858	3, 138, 020	6, 141, 238	2, 847, 503	2, 109, 199	14, 236, 060	6, 123, 060	9, 943, 943	....	4, 658, 699	20, 725, 702	3, 385, 688
The other 156 cities with more than 10,000 inhabitants:												
5 in East Prussia ...	189, 284	374, 477	441, 225	275, 727	289, 278	1, 380, 707	1, 852, 040	100, 547	....	40, 960	1, 993, 547	432, 073
4 in West Prussia...	164, 594	281, 865	855, 256	208, 445	219, 195	1, 064, 761	1, 445, 283	212, 411	....	104. 788	1, 762, 481	472, 709
17 in Bradenburg	351, 430	830, 956	809, 508	474, 661	404, 836	2, 519, 461	2, 422, 059	320, 870	55, 658	316, 833	3, 115, 420	1, 348, 502
9 in Pomerania......	215, 630	543, 853	641, 237	416, 906	316, 992	1, 918, 988	1, 393, 999	216, 370	37, 966	39, 187	1, 687, 522	899, 569
5 in Posen	125, 722	259, 581	372, 189	203, 904	169, 341	1, 005, 015	777, 125	32, 880	....	303, 655	1, 113, 660	386, 249
23 in Silesia..........	604, 564	1, 379, 886	1, 975, 411	965, 679	951, 401	5, 272, 377	4, 226, 707	299, 101	1, 031	1, 483, 377	6, 010, 216	2, 065, 895
23 in Saxony..........	509. 999	1, 280, 993	1, 507, 229	820, 480	696, 798	4, 307, 500	3, 451, 845	600, 987	19, 551	312, 799	4, 385, 182	2, 163, 283
8 in Schl. Holstein ..	209, 821	477, 617	373, 213	314, 162	299, 117	1, 464, 109	1, 316, 097	2, 217, 767	... .	1, 180, 143	2, 718, 007	754, 629
9 in Hanover.........	251, 996	738, 214	602, 161	354, 097	386, 877	2, 081, 349	1, 295, 153	141, 363	25, 812	773, 619	2, 235, 947	771, 885
15 in Westphalia.....	319, 413	743, 036	618, 961	424, 735	412, 961	2, 199, 693	2, 705, 295	245, 556	91, 954	45, 351	3, 085, 056	1, 599, 550
32 in Rhineland......	1, 027, 038	2, 410, 162	3, 853, 801	1, 746, 708	1, 623, 564	9, 134, 235	12, 307, 885	879, 400	143, 303	854, 740	14, 185, 330	3, 590, 557
6 in Hesse-Nassau ..	246, 054	858, 170	1, 791, 161	643, 219	486, 803	3, 779, 353	1, 871, 178	839, 910	111, 334	1, 472, 068	4, 294, 490	1, 141, 207
Total	5, 182, 403	13, 316, 930	18, 984, 590	9, 696, 226	8, 365, 812	50, 363, 608	41, 187, 627	14, 052, 105	486, 609	11, 586, 219	67, 312, 560	19, 011, 776
County communities and small towns with less than 10,000 inhabitants..	20, 493, 535	26, 475, 959	10, 058, 285	46, 047, 995	8, 738, 166	91, 320, 405	28, 812, 373	43, 947, 895	1, 313, 391	20, 186, 712	94, 260, 371	54, 965, 757
Aggregate........	25, 675, 938	39, 792, 889	29, 042, 875	55, 744, 221	17, 104, 028	141, 684, 013	70, 000, 000	58, 000, 000	1, 800, 000	31, 772, 931	161, 572, 931	73, 977, 553

In the foregoing statement the system of taxation of the Prussian Monarchy has been described. We turn now to the budget of the German Empire, to which all the German states contribute. The taxes mentioned therein (second part) are paid and borne by all the German states:

Budget of the German Empire, according to the budget of 1881-'82.

EXPENDITURES.

	Marks.
Military (army, navy, and pensions)	419,180,000
Civil service	19,041,000
Imperial debt	10,603,000
Fixed expenses of the Empire	448,824,000
Military	64,203,000
Civil service	16,991,000
Imperial debt	110,000
Extraordinary tax for the year	81,304,000
Military	483,383,000
Civil service	36,032,000
Imperial debt	10,713,000
Total expenditure	530,128,000

RECEIPTS.

Duty on tobacco (without deduction of costs)	45,000,000
Other duties (deducting costs)	143,250,000
	188,250,000
Duties of all kinds (deducting costs):	
Taxes on tobacco	4,578,000
Taxes on sugar	49,553,000
Taxes on salt	36,367,000
	90,500,000
General taxes on articles of consumption (deducting costs):	
Tax on brandy	34,854,000
Tax on beer	15,096,000
	49,950,000
Duties and general taxes (deducting costs)	328,700,000
Indemnities paid by countries outside of the boundary of the custom-house union	4,634,000
Indemnities paid instead of taxes on beer and brandy	13,396,000
Consume taxes and indemnities	346,730,000
Stamp taxes, checks, cards, and statistical stamp	7,506,000
Receipts from taxes	354,236,000
Net gain of railways, post, telegraph, &c	82,304,000
Receipts of the administration	5,815,000
Contribution from the invalids' funds	31,071,000
Contribution from other funds	17,410,000
Surplus from former years	6,530,000
	447,366,000
Receipts from other sources than taxes	93,130,000
So-called independent receipts	540,496,000
Matricular contributions	27,065,000
Loans	53,545,000
Total receipts	621,103,000

This sum of 621,103,000 marks does not include the special contributions (indemnities for being outside of custom-house duties) of the cities of Hamburg and Bremen, amounting to 2,155,000 marks.

Matricular contributions are called the various contributions of the single states, which they have to contribute according to Art. 70 of the constitution of the empire towards meeting the requirements of the budget of the empire.

Observation of the system of taxation in Germany, and more especially in Prussia, leads to the conclusion that it is not so much the taxation by the state, but the taxation which the single communities (towns, villages, &c.) impose on their inhabitants, which cause the general complaint of the great pressure of taxations on the population.

As a rule, it may be said that the communities in Prussia labor under a degree of financial distress. This has been caused by expenditures and sometimes even uncalled-for improvements by the communities during the last ten years.

A reduction of these communal taxes is not within the reach of possibility, unless the state take in the future care of some institutions which heretofore have been provided with necessary funds by the communities.

The great evil of the communal taxation is to be found in the system of taxing annual incomes instead of taxing estates, the trades, &c., of the inhabitants.

It is the declared intention of the Government to release the communities from the burden of supporting and paying for public schools, and so have that expense upon the budget of the state.

To provide for the execution of this scheme is one of the intentions of the present reform programme, which includes the creation of the tobacco monopoly.

On the other side, the Government reform programme proposes to surrender to the communities all the receipts of taxes on real estate, trade, &c.

The execution of this reform programme depends on the result of the pending decision concerning the tobacco monopoly and other financial projects of the Imperial Government.

Regarding the Klassen-Steuer tax on incomes from 420 marks to 3,000 marks, which is divided into twelve classes, it is the intention of the Government to discontinue it. It being the opinion of Prince Bismarck that any annual income below 3,000 marks should be free of taxation. This tax is very burdensome for the poorer part of the community, executions often taking place when the tax is not promptly paid, leaving the poor man without means of support. For instance, between April 1, 1878, April 1, 1879, the number of persons in Prussia subject to the Klassen-Steuer amounted to the total of 5,116,555, of those 2,662,104 persons, or 52 per cent., belonged to the first class (the lowest); 1,098,771 persons, or 25.5 per cent., belonged to the second class; 360,657 persons, or 7.1 per cent., belonged to the third class; 995,023 persons, or 19.4 per cent., belonged to other classes (from 4 to 12).

The number of *executions* in the same period amounted to 1,180,565; of that number the following classes had their share:

Class 1: 657,190 executions, or 55.7 per cent. of the total number.
Class 2: 314,904 executions, or 26.7 per cent. of the total number.
Class 3: 83,430 executions or 7.0 per cent. of the total number.
Class 4 to 12: 125,041 executions or 10.6 per cent. of the total number.

The majority of the executions, *i. e.*, 657,190, affected the poorer class of taxpayers, those whose *annual* income varied between 420 marks and 660 marks.

Between April 1, 1880, and April 1, 1881, the total number of class taxpayers in Prussia was 5,065,834, of which 2,704,132 persons, or 53.4 per cent., belonged to the first (the lowest) class.

The total number of executions in the same period amounted to 1,556,507 executions, of which 994,434 executions, or 63.9 per cent., affected the poorest taxpayers, those of the first (the lowest) class.

During the last three years, from April 1, 1878, to April 1, 1881, the total number of executions was 3,304,065, of which number 1,979,657 executions, or 59.9 per cent., affected the poorest class of taxpayers.

It will be the future effort of the German Government, which is eminently paternal, to relieve its people from taxation. But the location of the state will always require a large standing army to prevent the encroachments of neighboring countries.

This with the usual expenses of a first-class nation combined with a desire to have the people well educated and provided with the improvements of the age, will render it difficult to reduce taxation from its present standpoint, which is as great as the nation can well bear.

EDWARD M. SMITH,
United States Consul.

UNITED STATES CONSULATE,
Mannheim, *December* 15, 1882.

NOTES.

Trade of Japan.—According to official returns transmitted to the Department by Minister Bingham, the foreign trade of Japan for the month of May was as follows: Exports, 2,435,066 gold yen; imports, 2,646,369 gold yen; an excess, in imports, of 211,303 gold yen. The exports of specie amounted to 424,658 gold yen, being an excess over the imports of 305,658 yen. The duties collected on imports amounted to 128,331 gold yen.

Manufacture of brandy in Bavaria for 1882.—The number of distilleries in the year 1882, was: in the cities, 455, an increase of 55 over 1881; in the country, 4,865, an increase of 778 over 1881. Total number of distilleries, 5,320, an increase of 833 over 1881. The tax on brandy was $504,956.74, an increase of $68,919.80 over 1881. There were used of raw materials: potatoes, 112,488,500 quarts; corn, 27,377,000 quarts; molasses, 17,800 quarts; beets, 2,900 quarts; fruits with seeds, 1,546,700 quarts; stone fruits, 652,800 quarts; skins of pressed grapes, 6,685,100 quarts; brewery refuse, 15,768,800 quarts; lees, 3,518,100 quarts; other materials, 486,200 quarts; an increase over 1881 of: potatoes, 8,572,900 quarts; fruits with seeds, 380,200 quarts; skins of pressed grapes, 1,552,100 quarts; lees, 513,500 quarts; other materials, 266,200 quarts; a decrease from 1881, of: corn, 1,463,800 quarts; molasses, 60,100 quarts; beets, 1,800 quarts; stone fruits, 213,700 quarts; and brewery refuse, 986,500 quarts. The number of distilleries which prepared brandy by means of distilling was 885, a decrease of 31 from 1881. The number of distilleries which did not complete the preparation of brandy by distilling was 4435, an increase of 864 over 1881. Number of vinegar manufactories, 161, an increase of 10 over 1881. Number of the remaining manufactories, 18, an increase of 8 over 1881. The import of brandy from the states of Northern Germany, including Alsace-Lorraine, was 1,704,432 quarts, a decrease of 3,187,340 quarts from 1881. From the other German states 317,521 quarts, a decrease of 120,753 quarts from 1881. Imports from outside of Bavaria, 164,615 quarts, a decrease of 26,316 quarts from 1881. The export of brandy to the states of Northern Germany, including Alsace Lorraine, was 385,026 quarts, an increase of 72,797 quarts over 1881. To other German states, 631,936 quarts, an increase of 26,749 quarts over 1881.—*From Consul Harper, of Munich.*

American imports into Cape Haytien.—Statement showing the imports from the United States into Cape Haytien, during the quarter ending March 31, 1883:

Alewives	barrels	295
Do	half-barrels	175
Axes	dozen	20
Apples	barrels	15
Beets	barrels	4
Beer, ginger, in half-bottles	dozen	130
Beef, salt	barrels	4
Do	half-barrels	3
Do	quarter-barrel	1
Bellows, large		1
Biscuits	pounds	7,020
Boards	feet	198,732
Butter	pounds	30,180
Candles, tallow	pounds	2,747

Cheese	pounds	1,330
Chairs	dozen	17
Chairs, rocking	dozen	2
Codfish	pounds	273,600
Cotton goods	yards	77,970
Denims	yards	23,150
Drilling, blue	yards	119,330
Drugs and medicines	cases	39
Duck	yards	8,842
Drinking-glasses	dozen	230
Flour	barrels	4,380
Do	half-barrels	1.395
Do	quarter-barrels	1,460
Furniture	sets	15
Hats	dozen	7
Herrings, smoked	boxes	3,040
Hams	pounds	4,281
Iron, in bars	pounds	4,795
Iron railing		1
Iron axle-trees		6
Lard	pounds	50,080
Mackerel	barrels	565
Do	half-barrels	31
Matches	gross	2,155
Meats, preserved	dozen cans	5
Machines, sewing	dozen	7
Nails	kegs	44
Onions	barrels	15
Oakum	bales	9
Oats	barrels	14
Oars	dozen	7½
Oil, kerosene	gallons	12,200
Oil, linseed	gallons	53
Paint	kegs	113
Potatoes	barrels	12
Pork	barrels	1,533
Do	half-barrels	40
Pails	dozen	18
Pepper, black	pounds	1,390
Raisins	quarter-boxes	50
Rope	coils	5
Scales, large		1
Scantlings	feet	67,674
Slates		20,333
Shingles		140,000
Shoes	dozen	7
Soap	boxes	20,350
Sugar, white	pounds	38,671
Tar	barrels	6
Toys	cases	7
Tobacco	pounds	5,285
Trunks	nests	19
Tubs	nests	6
Turpentine, spirits of	gallons	25
Water, Florida	dozen	10
Zinc	sheets	32

The whole amounting in value to $166,229.41.

STANISLAS GOUTIER, *Consul.*

American products at Havre.—Consul Glover forwards the following statement of direct imports into Havre from the United States, during the quarter ending March 31, 1883:

Apples, dried	barrels	4,443
Do	cases	100
Do	sacks	52
Asbestos	casks	5
Bark	bales	396
Do	sacks	10,500

Blacking	cases	125
Bones	sacks	280
Books	cases	3
Bowels	tierces	3
Bungs	barrels	12
Butter	packages	874
Cattle hoofs	sacks	1,378
Cedar wood	logs	635
Champagne	casks	225
Cheese	cases	102
Clover seed	sacks	10,799
Cloves	bales	90
Coal-black	barrels	25
Cocoa	sacks	4,081
Cocoa-nuts	sacks	10
Coffee	sacks	38,767
Copper	barrels	90
Cotton	bales	133,491
Cotton seed	sacks	1,636
Crucibles	casks	74
Drugs	packages	22
Dye (extract)	barrels	25
Effects	packages	3
Emery grindstones	cases	5
Fish eggs	barrels	261
Fish, dried	cases	3
Fish-roes	barrels	40
Flour	barrels	20
Do	sacks	7,895
Fruit, dried	cases	4
Gasoline	cask	1
Glass-ware	barrels	106
Glue	barrel	1
Goat skins	bales	74
Hams	cases	2
Hardware, &c	packages	5,275
Do	pieces	2
Hemp	bales	50
Hides	packages	262
Do		804
Hominy	cases	20
Horns	sacks	600
Horse-hair	bales	120
India rubber	bales	437
Do	cases	13
Indian corn	tons	800
Do	sacks	2,477
Do	cases	48
Indigo	seroons	372
Iron casks (empty)		50
Kaolin	barrel	1
Kid skins	bales	74
Lard	tierces	19,662
Do	tubs	10,540
Do	packages	4,827
Lard oil	barrels	290
Leather	bale	1
Do	sacks	14
Lobsters	cases	20
Logwood	tons	200
Lumber	pieces	8,801
Do	tons	100
Mahogany	logs	380
Maplewood	pieces	494
Mats	packages	78
Meats, preserved	cases	1,584
Do	barrels	76
Millet seed	sacks	125
Miscellaneous	packages	2,567
Molasses	barrels	8

Moss	bales	3
Naphtha	barrels	8,170
Nuts	sacks	133
Do	case	1
Do	barrels	3
Nutwood	pieces	60
Oars	packages	58
Do		1,890
Oils	barrels	3,130
Do	cases	652
Paint	cases	6
Paper paste	rolls	2,950
Pease	sacks	20
Perfumery	cases	42
Pearlash	barrels	30
Petroleum	barrels	49,609
Phosphate	tons	800
Pitchforks and handles	packages	3,222
Pork	barrels	80
Potash	barrels	345
Preserves	cases	100
Rice	barrels	36
Roots	bales	3
Sassafras	case	1
Sarsaparilla	bales	3
Seeds	sacks	1,150
Do	barrels	6
Silks	cases	2
Silk-worms' eggs	cases	670
Silver	bars	151
Skins	bales	59
Spermaceti	cases	30
Spirits	cases	53
Sponges	bales	166
Staves		116,754
Sugar	barrels	4
Tallow	hogsheads	320
Timothy seed	sacks	383
Tobacco	case	1
Do	bales	40
Do	hogsheads	2,093
Tortoise shells	barrels	13
Do	sacks	48
Turpentine	barrels	1,465
Vanilla	case	1
Vine cuttings	cases	3
Whalebone	packages	448
Whale oil	casks	103
Wheat	bushels	35,048
Do	tons	7,400
Do	sacks	162,909

Crops in Belgium.—Mr. Fish, the minister of the United States at Brussels, transmits a report from the Moniteur Belge concerning the condition of the crops throughout Belgium.

The returns on which the report is based are given by provinces, and the dates of the returns run from June 18 to July 3d. Potatoes are returned as very good; wheat, barley, buckweat, oats, beans, pease, and fruit as good; spelt, colza, and hay as fair; rye is returned as poor. This will necessitate a large import of foreign rye.

Canadian Copper for the United States.—The consul at Coaticook reports that until quite recently the ore was smelted at the mines before being shipped to the United States, but it was found that there was a great loss in sulphur. The ore is now crushed and in that condition shipped to the United States, parties there paying all the expense of freight for the sulphur they can obtain therefrom.

American and British Manufactures in Canada.—Consul Crawford, ot Coaticook, reports that articles of American manufacture are preferred by the people of his district to those of British manufacture. Durability, with lightness of construction, gives them a decided advantage over the heavy and cumbersome articles of British make. The American goods are, to use the words of the Canadian, "more nobby." Farm implements, carriages, sleighs, sewing-machines, and, in fact, a large proportion of the articles now manufactured in Canada are of American pattern. It could not be expected that it should be otherwise. So closely are they and all their interests allied; so intermixed have the people of the two nations become by social intercourse, by trade and by marriage, inhabitants of the same continent, their wants, their ambitions, and their future destiny must be the same.

Manufacture and Taxation of Beer in Bavaria for 1882.—Commercial Agent Harper, of Munich, under date of July 11, 1883, supplies the following statistics:

According to a statistical publication of the general direction of customs, the production of brown beer amounted to 1,186,178,200 quarts against, in 1881, 1,207,921,500 quarts; decrease in 1882 of 21,743,300 quarts. The result in the principal custom-house districts was: Munich, 279,561,400 quarts; Nuremberg, 112,043,400 quarts; Augsburg, 109,462,900 quarts; the smallest quantity produced was 7,429,200 quarts in Lindan. The amount of white beer produced was 24,577,800 quarts against 25,773,200 quarts in 1881, a decrease in 1882 of 1,200,400 quarts. The product was, in Memmingen, 10,053,800 quarts; Augsburg, 7,635,800 quarts, and Munich, 4,211,200 quarts.

The total consumption of malt by the breweries amounted to 524,882,400 quarts against 534,273,400 in 1881, a decrease in 1882 of 999,100 quarts. The quantity consumed in Munich was 122,963,000 quarts; Nuremberg 49,499,800, and Augsburg 47,251,700 quarts. The income on malt impost amounted, in total, to $7,481,801.55 against $7,697,018.29 from 1881. Besides these broweries there were also 10 vinegar-boiling establishments in 1882. In these boiling establishments there was used 13,900 quarts of malt, on which the tax was $132.32.

The export of beer from Bavaria amounted, in total, to 98,583,087 quarts against 88,794,633 quarts in the year 1881, an increase of 9,788,454 quarts over 1881. Of this Munich sent 23,206,882 quarts, Bayreuth 21,153,153 quarts, Nuremberg 17,665,356 quarts, and Fürth 13,394,817 quarts.

The amount of malt-tax drawback was $614,170.44 against $556,544.71 in 1881, making an increase in 1882 of $57,625.72 over 1881. The tax on beer imported into Bavaria was (*a*) from the states of the German customs territory 3,283,394 quarts against 3,442,861 quarts in 1881, a decrease in 1882 of 159,467 quarts from 1881, with a tax of $25,402.95 against $26,636.69 in 1881, a decrease in 1882 of $1,233.74 from 1881; (*b*) from foreign countries 432,210 pounds against 551,786 pounds in 1881, a decrease in 1882 of 119,576 pounds.

In the year 1881 there was produced from the Munich breweries 33,039,647 gallons of beer, of which about 8,810,572 gallons were exported, with a value of over 7,000,000 marks. It is calculated that the export will, in 1883, amount to 13,215,859 gallons, with a value of 10,000,000 marks.

Population of China.—Minister Young, of Peking, under date of May 22, 1883, transmits the following statistics:

I have been informed indirectly, but from official sources, that the census of China, as taken last year for purposes of taxation, shows a total population of 255,000,000.

This does not include the Mongolian or other outlying dependencies of the empire, but only the eighteen provinces of China proper. Nor does it embrace the aboriginal tribes which exist in very considerable numbers in the island of Formosa and the provinces of Kuangsi, Yunnan, Knei Chow, and Szchuan.

Making due allowance for understatements due to the purpose for which the census was taken, and for the aboriginal tribes mentioned above, and for the Mongolian dependencies, which are really an integral part of the empire, it is probable that the sum total of the population of China really exceeds 300,000,000.

Lyons Silk Trade.—Under date of May 23 the consul at Lyons reports that the condition-house of Lyons has weighed up to this date somewhat less silk than for the *same period* of last year. The exports of pure silk goods have fallen behind about $1,544,000, and those of mixed silk goods decreased $289,500. The total exports of French silk goods up to date have amounted to $13,896,000, in the following proportion: Exports of pure silk, manufactured, $9,650,000; exports of mixed silk, $4,246,000.

The European Silk Harvest.—Consul Peixotto, of Lyons, under date of May 23, 1883, reports that—

> The beautiful weather of the past fortnight has greatly favored the spring silk crop.
>
> Latest reports from all sections of France, Italy, Spain, and the Levant give promise of an abundant supply of mulberry leaves and, according to locality, indicate the happy fecundation of the silk-worm.
>
> In Spain the worms are approaching the fourth stage; in France the second has been safely passed, and the third entered under flattering auspices.
>
> The districts of Piedmont, Lombardy, Udine, Ancona, and Messina, in Italy, considering the delay caused by the unfavorable weather at the commencement of the season, present to-day scarcely less promise than the most favored in France.
>
> In Sicily and Naples the worms are from the second to the fourth period; from the second to the third in Tuscany; in the second in Lombardy and Piedmont. Everywhere in Italy the mulberry leaves are abundant and in advance of the worms.

INDEX.

A.

Page.

- Adulteration of olive oil ... 378
  - wine in France ... 391–394
- Agriculture: cereals of Ontario ... 311
  - progress in the Argentine Republic ... 309–332
  - Denmark as a grain-producing country ... 378
- American trade in Asia Minor ... 189–191
  - with Colombia ... 195–200
  - steamships wanted at Colombia ... 195
  - proprietary medicines in Belgium ... 211, 212
  - salt meats in France ... 219, 220
  - imports into Cape Haytien ... 400
  - products at Havre ... 400
  - and British manufactures in Canada ... 413
- Amsterdam Exhibition ... 379
- Archipelago: the Seychelles ... 348–353
- Argentine Republic: agricultural progress in ... 309–332
- Asia Minor: American trade in ... 189
- Australia: fidelity guarantee policies in ... 287–292
- Austria: postal savings banks in ... 368–374
- Average value of Italian imports and exports ... 251–260

B.

- Bahama Islands: trade of the ... 202–206
  - with the United States ... 203
  - our new tariff ... 204
  - navigation ... 205
  - as a winter resort ... 206
- Banks and banking of Colombia ... 293–295
- Bavaria: manufacture of brandy in ... 409
  - beer, and taxation ... 413
- Beer: taxation of, in Bavaria ... 413
- Belgium: American proprietary medicines in ... 211
  - foreign commerce of ... 213–217
  - general trade of ... 213
  - trade of, with the United States ... 214
  - increase of import duties ... 363, 364
  - crops in ... 412
- Berlin: hygienic exhibition in ... 353, 354
- Bonds: bottomry, Spanish laws on ... 231
- Bones: for cutlery of, Sheffield ... 235
- Bordeaux. (*See* France.)
- Bottomry bonds: Spanish law on ... 231
- Brandy: manufacture of, in Bavaria ... 409
- Brewers of Leeds ... 194

Page.

British manufactures: our new tariff and 191-195
  and American in Canada 413
Butchers of Leeds 194

C.

Canada: trade with the United States 207, 208
  condition of trade in Ontario 209, 210
  protective policy of 217-219
  industry of 296-298
  copper of, for the United States 412
  American and British manufactures in 413
Cape Haytien: American imports into 409
China: population of 413
Coal industry of France 279
Colombia: trade of, with the United States 195-200
  and its people 223-226
  banks and banking of 293-295
Commerce: foreign, of Belgium 213-217
    of Guatemala 269-271
    of the Argentine Republic 295, 296
  and products of Greece 300-349
  foreign, of Portugal 358
    of Germany 358, 363
Condition of trade in Ontario 209, 210
  commerce, finance, and politics of the Argentine Republic 295, 296
Copper: Canadian, for the United States 412
Crops in Belgium 412
Cutlery industry of Sheffield 233-249

D.

Dairy experiments in Denmark 239-251
Debt: Mexican national 292, 293
Denmark: dairy experiments in 239-251
  as a grain-producing country 374-378
Duties: import, of Belgium 363, 364

E.

Electric locomotive head-lights 226, 227
European silk harvest 414
Exhibition: hygienic, Berlin 353
  Amsterdam 379
Experiments: dairy, in Denmark 239-251
Exports of Barranquilla 196, 198
  Italian, value of 251-260
  Mexican, &c 272-275
  of Italy 357
  of Germany 358-363
  Italian, and United States tariff 380, 381

F.

Finance: of the Argentine Republic 295, 296
Fishery board, new, of Scotland 355
Flax: trade of, Leeds 193, 194
Florence. (*See* Italy.)

Page.

France: American salt meats in 219, 220
precious metals of 276
mineral and metal industries of 279
importation of wine into 355
Spanish wines in 364-367
adulteration of wines in 391-394
American products at Havre 410
Franchise: elective, of Holland 381-386

G.

Germany: imports and exports 358-363
taxation in 394-408
on commerce 398
hotels, &c 399
navigation 399
freight 400
stabling 400
landed property 400
houses 401
municipal 401
trade, &c 402
Greece: commerce and products of 300-309
Guatemala: foreign commerce of 269-271

H.

Havre: American products of. 410
Haytian: tariff changes 298-300
Headlights: electric locomotive 226, 227
ory of Colombia 201
Holland. (*See* The Netherlands.)
Horn: for cutlery of Sheffield 234
Hygiene: exhibition at Berlin 353, 354

I.

Immigration: Mexico inviting 332-348
Imports: into Colombia from the United States 196, 199
Italian, value of 251-260
of wines at Bordeaux 354
of Italy 357
of Germany 358-363
duties of Belgium, increased 363, 364
American, into Cape Haytien 409
Industry: of Leeds 191-195
cutlery, of Sheffield 233-239
of Canada 296-298
Institutions: charitable, of Florence 386-390
Iron: industry of Leeds 194
of France 279
of New Zealand 280-285
sand of New Zealand 285-287
Islands Bahama, trade of 202-206
Italy; straw goods trade of 228-231
value of imports and exports of 251-260
imports and exports of 357

Page.

Italy: exports and United States tariff 380
  charitable institutions of 386-390
Ivory: for cutlery, Sheffield 233

J.

Japan: tea trade of 260-266
  trade of 409

L.

Labor. (*See* wages; *also* Industries.)
Law: Spanish, on bottomry bonds 231
  Mexican patent 266-269
Leeds. (*See* British.)
Leith: shipbuilding in 228
Liability act of England 195
Linen trade of Leeds 193, 194
Locomotives: head-lights, electric 226, 227
Lyons silk trade 413

M.

Manufactures: our new tariff and British 191-195
  of brandy in Bavaria, 1882 409
  American and British, in Canada 413
Mauritius, American trade in 200-202
Meat, American salted, in France 219, 220
Medicines: American medicines in Belgium 211
Metals: precious, of France 276
  precious, of Mexico 277, 278
  industries of France 279, 280
Mexican: patent laws 266-269
  exports 272-275
  precious metals 277, 278
  national debt settlement 292, 293
  immigration invited 332-348
Mineral industries of France 279
Mines of Venezuela 271, 272
Monterey, the valley of 220-223

N.

Netherlands: elective franchise in 381-386
New Zealand: iron and steel trade of 280-285
  iron-sand and American separators 285-287

O.

Oil, olive, pure and adulterated 378
Olive (*see* Oil)
Ontario: condition of trade in 209, 210
  exports to the United States 209
  trade in elm timber 209
  reciprocity in Canada 209
  how to increase United States trade 211
  cereals of 211
  emigration to the United States from 211

P.

Page.

Patent law of Mexico 266, 269
Pearl, mother of, for cutlery of Sheffield 236
Petroleum: imported into Mauritius 202
Policy: protective, in Canada 217
fidelity guarantee in Australia 287, 291
Population of China 413
Port Stanley. (*See* Canada.)
Postal savings banks in Austria 368, 374
Prices of imported articles in Colombia 196
of straw goods in Italy 229
in the Argentine Republic 335
Products of Greece 300–309
Protective: policy in Canada 217–219

S.

Salt meat, American, in France 219, 220
Savings banks (postal) in Austria 368, 374
Scotland, new fishery board of 353–356
Seychelles: Archipelago 348–353
description of the island 348
population 349
government, language, money, religion 350
education 351
imports and revenues, agriculture and products 352
American whalers 352
Sheffield: cutlery industry of 233
Ships, steam:
American, wanted 195
builders in Leith 228
Silk: Lyons trade 413
European harvest 414
Spanish law on bottomry bonds 231
wines in France 364–367
St. Thomas. (*See* West Indies.)
Steel: industry of France 279
industries of New Zealand 280–284
Straw goods trade of Italy 228–231

T.

Tanners of Leeds 194
Tariff: our new, and British manufactures 191–195
Haytian, changes in 298–300
American and Italian exports 380
Taxation in Germany 394–408
on Bavaria beer 413
Tea trade of Japan 260–266
Tortoise shell: for cutlery of Sheffield 237
Trade, American, in Asia Minor 189–191
with Colombia 155–200
Mauritius 200–202
the Bahama Islands 202–206
between Port Stanley and St. Thomas 207, 208
condition of, in Ontario 209, 210

Page.

Trade: of straw goods in Italy 228–231
  tea, of Japan 260–266
  iron and steel, of New Zealand 279–284
  of Japan 409
  silk, of Lyons 413

U.

United States trade with Asia Minor 189–191
    Colombia 195–200
    the Bahama Islands 202
    Port Stanley and St. Thomas 207, 208
  Canadian copper for the 412
  and British manufactures in Canada 413

V.

Valley of Monterey 220–223
Value of Italian imports and exports 251–260
Venezuela: mines of 271, 272

W.

Wages in Sheffield cutlery industry 238
Wines: importation of, at Bordeaux 354
  Spanish, in France 364–367
  adulteration of, in France 391–394
Woolen goods trade of Leeds 191–193

UNITED STATES CONSULAR REPORTS.

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

No. 33.—September, 1883.

PUBLISHED BY THE DEPARTMENT OF STATE, ACCORDING TO ACT OF CONGRESS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

CONTENTS.

CONTINENT OF AFRICA.

Page.

American whalers at St. Helena 454, 455
(Report by Consul Macknight.)

CONTINENT OF AMERICA.

The proposed commercial treaty between the United States and Mexico...... 415–428
(Report by Consul-General Sutton, of Matamoros.)
Treaty between Mexico and Germany 428–435
(Report transmitted by Minister Morgan.)
Trade of Antigua 445, 446
(Report by Consul Jackson.)
Trade and industries of Monterey 450–452
(Report by Consul Campbell.)
Exports of British Guiana 455, 456
(Report by Consul Figyelmesy, of Demerara.)
Mexican exports 473–478
(Report by Consul-General Sutton, of Matamoros.)
Yellow fever: scientific experiments in transmission by contagion 478–480
(Report forwarded by Consul-General Andrews, of Rio de Janeiro.)
Commerce and prospects of Samana 480–483
(Report by Consul Bacon.)
Cattle-raising in Brazil 483, 484
(Report by Consul-General Andrews.)
Cattle raising in Southern Brazil 484, 485
(Report by Vice-Consul Preller, of Rio Grande do Sul.)
New cotton mill on the St. Croix 535–539
(Report by Consul Lange, of St. Stephen.)
Exports and imports of Windsor, Canada 568, 569
(Report by Consul Ewers, of Ontario.)
Trade and commerce of La Paz, Lower California 577, 578
(Report by Consul Viosca.)
Mexican cotton crop 600
(Report by Consul Sutter, of Acapulco.)
Crops of Ontario 607, 608
(Report by Commercial Agent Robbins, of Ottawa.)

CONTINENT OF ASIA.

Commerce of the Dutch East Indies and the share of the United States therein 438–441
(Report by Consul Eckstein, of Amsterdam.)

AUSTRALASIA.

Australasian agriculture 504–512
(Report by Consul Griffin, of Auckland.)

CONTINENT OF EUROPE.

Page.

Counterfeiting American manufactures in Russia ... 435
(Report by Consul Van Riper.)

American agricultural machinery in Italy ... 436, 437
(Report by Deputy Consul-General Wood.)

Trade and industries of Birmingham ... 441–445
(Report by Consul King.)

British pottery and the tariff ... 446–449
(Report by Consul Lane, of Tunstall.)

The commerce of Chatham ... 449, 450
(Report by Commercial Agent Buffington.)

Farming in the United States and Germany ... 452–454
(Report by Consul-General Vogeler, of Frankfort-on-the-Main.)

Trade and commerce of Portugal ... 456–470
(Report by Consul-General Francis, of Lisbon.)

The new French Mediterranean port of St. Louis ... 470–473
(Report by Consul Peixotto, of Lyons.)

Live stock in Europe ... 485–488
(Report by Consul Ryder, of Copenhagen.)

Live cattle in Bavaria ... 489–491
(Report by Consul Harper, of Munich.)

Grain commerce of Roumania ... 491–493
(Report by Consul-General Schuyler.)

Grain producing and consuming countries ... 494–498
(Report by Consul Ryder, of Copenhagen.)

The harvest in Denmark ... 498–500
(Report by Consul Ryder.)

Grain crops of Russia ... 501, 502
(Report by Consul Van Riper, of Moscow.)

Belgian crops ... 502, 503
(Report by Minister Fish.)

Crops of Silesia ... 503, 504
(Report by Consul Dithmar, of Breslau.)

Saxon house industry ... 512–516
(Report by Consul Bullock, of Annaberg.)

The linen industry of the United Kingdom ... 516–525
(Statistical tables transmitted by Consul Wood, of Belfast.)

Industrial and labor statistics of Russia ... 526–528
(Report by Consul-General Stanton.)

Industrial statistics of Bavaria ... 528–532
(Report by Consul Harper, of Munich.)

Industrial interests of Portugal ... 533–535
(Report by Consul-General Francis.)

Cultivation of the orange tree in Spain ... 539–566
(Report by Consular Agent Loewenstein, of Grao de Valencia.)

The Forth Bridge ... 566–568
(Report by Consul Leonard, of Leith.)

The commerce of Rheims with the United States ... 570–574
(Report by Consul Frisbie.)

The raw-silk industry of Italy ... 574–577
(Report by Consul Crain, of Milan.)

Viticulture and the Black Hand of Western Andalusia ... 579, 580
(Report by Consul Oppenheim, of Cadiz.)

The silk harvest in France ... 581. 582
(Report by Consul Peixotto, of Lyons.)

Page.
German anilines 582–587
(Report by Consul Ballow, of Kehl.)
Tobacco in France 587–589
(Report by Consul Peixotto, of Lyons.)
Tobacco imports of France 589–591
(Report by Consul Peixotto.)
Coinage and currency of the United Kingdom 591, 592
(Report by Minister Lowell, of London.)
Revenue returns of Great Britain 592–594
(Report by Vice-Consul Mitchell, of London.)
English railways 594–597
(Report by Consul Grinnell, of Bradford.)
South Wales coal and iron shipments 597, 598
(Report by Consul Sikes, of Cardiff.)
Crops of Holland 598–600
(Report by Consul Eckstein, of Amsterdam.)
The Servian tariff of imports 601–607
(Report by Consul Schuyler, of Athens.)

NOTES.

Madeira embroidery 609
Tea experiment in Germany 609
Paraguayan statistics 609
Adulteration of American petroleum 609
Emigration from Germany 609
British trade changes, 1854–1880 610
New paper material 610
American imports at Havre 611
Test for coloring-matter in wine 613
Steam tonnage in South Wales 613
The harvest of 1883 in Germany 613

CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

NO. 33.—SEPTEMBER, 1883.

THE PROPOSED COMMERCIAL TREATY BETWEEN THE UNITED STATES AND MEXICO.

REPORT ON THE PROPOSED TREATY BETWEEN THE UNITED STATES AND MEXICO, SHOWING THE COMPARATIVE VALUE OF THE CONCESSIONS MADE BY THE TWO COUNTRIES AND THE PROBABLE TRADE RESULTS THEREOF, BY CONSUL-GENERAL SUTTON, OF MATAMOROS.

The proposed treaty with Mexico has attracted much attention and its provisions have been generally discussed. I have therefore thought that a report on the subject would be of interest.

This report is based upon the imports for the year ending June 30, 1882, and upon the American tariff as it now stands. The actual changes are but few. Besides the money value of the concessions the very fact that there is a treaty will be of much value in increasing our trade in Mexico.

There is an idea of permanency about a treaty which tends to put business on a more settled basis than would a mere law.

Again, the Mexican tariff laws are the most involved of any on the face of the earth. Changes are continually being made, often without notice.

Contradictory rulings by collectors and the Treasury Department subject merchants to great damage.

The fact of *no duty* will greatly facilitate trade in certain articles even though the present duty is very small. For a better understanding of this subject, see my translation of the tariff laws and rates of duty of Mexico, page 300 of No. 20 of June, 1882, Consular Monthly Reports.

Article VI of the treaty provides that neither country shall charge any transit duty on goods imported for consumption. This is, I presume, intended to abolish the annoying State and city duties which more or less obtain throughout the country.

These duties have sometimes amounted to 12 per cent. on the full tariff. They have been paid in two or more States or cities on the same goods. While no reasonable estimate of their extent or value can be given, yet they are a great nuisance, and often a serious bar to commerce.

There is in the United States considerable opposition to special or tariff treaties. Yet as a nation we began by making and have always had in force more or less of such treaties. We have now no reasonable grounds for fearing that European political complications will result therefrom. We can afford to look at the subject in the light of our great and growing trade interests.

The first question, Does the United States receive concessions equal or greater than those which are conceded? is fully answered in the affirmative by the tables which follow.

The second question is, Will the treaty benefit our export trade to Mexico? There can be no doubt on this subject. It will increase our trade not only in articles named, but in all our trade.

It will, I believe, be fully within the facts to state that all American consular officers in Mexico are in favor of this treaty. Many may say that it does not go far enough, but that is of less importance. What we need is the treaty, and from its effects we can, in the future, safely venture to include more articles and to broaden the methods of commercial intercourse with Mexico.

We have not in the past had our fair share of Mexican trade. In a large degree it has been secured and held by Great Britain, Germany, France, and Spain. It is only recently that we have put forth active and intelligent efforts to get our share. This treaty is one of the most vital factors. It will aid the development of railways on our frontiers and in Mexico, and facilitate the better acquaintance of the two races.

The importance of this treaty has long been shown by the earnest and vigorous opposition made to it by the Germans, British, and other Europeans now in trade in Mexico.

The German Government has increased its consular officers throughout the Republic, urged them to watch over German trade, and is now discussing the adoption of a new commercial treaty with Mexico.

Largely inspired by the urgency of British manufacturers, the British Government has only within a month renewed the diplomatic relations which were broken off in 1867.

In the great struggle for Mexican trade we have the advantage of location and railway connections; but with the low rates of interest, the low prices at which they can sell their goods, their quick and cheap ocean freights, and the skill and perseverance with which Europeans prosecute the work we shall need all our advantages to keep the ascendancy.

Regarding the tables and comments which follow, the utmost care has been taken to make them reliable. I have also been careful not to estimate the advantages accruing to the United States more favorably than they seem likely to be if the treaty be approved.

articles named.

SCHEDULE OF MEXICAN ARTICLES TO BE ADMITTED *FREE OF DUTY* INTO THE UNITED STATES.

[NOTE.—The American tariff was changed July 1, 1883. The "duty" given is the new one. The "duties paid" are computed, and are what would have been paid had the new tariff been in force during the period named. All dates are for the year ending June 30, 1882, unless otherwise specially stated. The amount and value of imports are taken from the Annual Report of the Bureau of Statistics of the United States, except when otherwise stated.]

Nos.	Articles.	Duty.	Imports.	Duties paid.	Remarks.
(1) 1	Animals, alive, specially imported for breeding purposes.	Free	Not stated		By United States Treasury Regulations the law admitting live animals to free entry for breeding had been restricted to animals of superior stock. This was pronounced illegal by the United States Supreme Court and revoked in January, 1883. All such animals as can be used for breeding are practically free. This has greatly increased trade in such stock on this frontier.
(9) 2	Barley, not pearl . . . bushel	10 cents	$6,265	$538 80	Very small item.
(8) 3	Beef . . . pound	1 cent	Not stated		Do.
(6) 4	Coffee	Free	$1,817,584		No change. Trade steadily increasing; —— 17,020,699 pounds.
(17) 5	Eggs	Free	$205		No change.
(13) 6	Esparto and other grasses and pulp of, for the manufacture of paper.	Free	Not stated		Do.
(14) 7	Flowers, natural, of all kinds	Free	Not stated		Do.
(15) 8	Fruits. All kinds of fresh fruits, such as oranges, lemons, pineapples, limes, bananas, plantains, mangoes, &c.		Estimated $20,000	Estimated $4,000	In the United States statistics the imports from Mexico of "fruits of all kinds, including nuts," are stated at $53,161. In Mexican statistics the exports of "fruits, fresh and dried," to *all countries*, are given at $43,523.19, or in United States coin, say, $40,000. Imports of fresh fruits from Mexico may be safely stated at not to exceed $20,000; duties, $4,000.
	Oranges:				
	Box, 2¼ cubic feet	25 cents			
	Half box	13 cents			
	Barrel	55 cents			
	Per 1,000	$1.60			
	Lemons:				
	Box, 2¼ cubic feet	30 cents			
	Half box	16 cents			
	Per 1,000	$2			
	Oranges and lemons, n. e. s.	20 per cent			
	Limes	20 per cent			
	All other	Free			

TABLE A.—*Statement of the articles, duties, imports, &c.*—Continued.

Nos.	Articles.	Duty.	Imports.	Duties paid.	Remarks.
(26) 9	Goat-skins, raw	Free	Estimated $400,000		In United States statistics "goat-skins, raw," are included with hides, &c. In Mexican statistics "goat and kid skins" exported to all countries are stated at $669,557.77, or $600,000 in United States coin. There is a discrepancy, as the United States appears to have imported from Mexico hides and skins valued at $1,520,107, while Mexico, by her tables, only sent to *all countries* $1,670,812—eagle dollars, or, say, $1,503,731 United States coin. Probable value of imports of goat-skins would be $400,000.
(16) 10	Henequen, sisal, hemp, and all other like substitutes for hemp, per ton.	$25	$2,067,676	$48,207.50	Total tons, 19,284. Hemp, 51 tons; value, $5,737; duty, $125. Henequen, sisal, and other like substitutes, are classed under "jute, &c." Important concession.
(10) 11	Hide ropes	Free	Not stated		No change.
(11,27) 12	Hides, raw or uncured, whether dry salted, or pickled, and skins, except sheep-skin with the wool on, Angora goat-skins, raw, without the wool, and asses skin.	Free	Estimated $1,000,000		"Hides * * * and skins" does not include goat skins. As in United States statistics no separation is made, I estimate that of the total hides, goat and other skins, of $1,525,107, this item amounts to about $1,000,000.
(18) 13	India-rubber, crude and milk of	Free	$164,847		This includes crude gutta-percha.
(3,19) 14	Indigo	Free	$4,105		No change.
(20) 15	Ixtle, or Tampico fiber ton	$15	Estimated $250,000	Estimated $32,500	Ixtle, or Tampico fiber, has heretofore been free, but now pays $15 per ton. It is not stated separately. Mexican exports to all countries stated at $620,199.24, say in United States coin about $560,000. The main market is said to be Great Britain. Much has gone to Europe via New York. Imports either for transshipment or for consumption have been from $250,000 to $500,000. The present tariff of $15 per ton will raise New York price, turn more to Great Britain, and reduce the export.
(21) 16	Jalap	Free	Not stated		No account.
(12) 17	Leather, old scrap	Free	Not stated		Do.
(24) 18	Logwood, berries, nuts, archil, and vegetables for dyeing, or used for composing dyes.	Free	Not stated		Not important.
(23) 19	Molasses:				
	Not above 56°	4 cents per gallon	$1,771	About $168.80	Not important.
	Above 56°	8 cents per gallon			
(1) 20	Palm or coconut oil	Free	$2		No change.
(4) 21	Quicksilver	10 per cent	Not stated		No account.

(30) 22	Sarsaparilla, crude	Free	$8, 628		No change. Medicinal barks including sarsaparilla.
(7) 23	Shrimps, and all other shell-fish	Free	Not stated		No change.
(25) 24	Straw, unmanufactured	Free	Not stated		Do.
(5) 25	Sugar, not above No. 16, Dutch standard in color, per pound.	1⅜ cents to 2¾ cents	$102,147	Estimated $75, 000	2,931,649 pounds. Valuable concession. (See "sugar" under "comments on the tables.") Might, under proposed treaty, increase to twice or even four times its present value inside of six years.
(28) 26	Tobacco, leaf, unmanufactured, per pound.	35 cents, 75 cents, and $1	$31, 150	Estimated at lowest rate, $18, 487.	52,820 pounds. Tobacco, leaf, if 85 per cent. is suitable for wrappers, and more than 100 leaves to a pound; unstemmed, 75 cents per pound; stemmed, $1. All other tobacco in leaf, unmanufactured and unstemmed, 35 cents per pound.
(29) 27	Vegetables, fresh, of all kinds:				
	Potatoes per bushel	15 cents	Estimated $2, 000	$170.70	This would be at times a great convenience on the frontier.
	Other vegetables, fresh	10 per cent			
(22) 28	Wood and timber of all kinds:				
	Unmanufactured	Free	Free, $499,776		Very little change. Practically all free, now that Mexico has to export.
	Unmanufactured, including ship timber, squared or sided.	10 per cent	Dutiable, $9	$1.80	

SUMMARY.

Total value of imports stated in this list	$6, 376, 165
Value of imports now free of duty	3, 895, 147
Value of imports now dutiable	2, 481, 018
Value of duties remitted by treaty, and consequent loss to American revenue	179, 075

B.—*Statement of the articles, duties, imports and duties paid thereon in the "Mexican free list" in the proposed treaty between the United States and* ico, *showing the present and prospective value of the concessions made by Mexico, and the effect of such concessions on the trade in the articles named.*

SCHEDULE OF UNITED STATES ARTICLES TO BE ADMITTED *FREE OF DUTY* INTO MEXICO.

NOTES.—All dates are for year ending June 30, 1882, unless otherwise specially stated. The amounts and value of imports are taken from the Annual Report of United States Bureau of Statistics, unless otherwise stated. All metric denominations have the American equivalent in parentheses or below. The Mexican tariff is of three sorts: first the principal or regular duty, and which is the one usually given; second, an additional duty of 2 per cent. on the previous duty; third, a weight duty from 50 cents to $1 on each 100 kilograms (220 pounds), gross. Where this weight duty is of importance I have calculated the duties and marked them "Est." The Executive has lately been *authorized* to increase all duties 5 per cent. Articles marked "F" are in the so-called free list, and have only the weight duty. This weight duty is from 50 cents to $1 on each 100 kilograms gross (220 pounds); 50 cents, 75 cents 80 cents, or $1 *means a weight duty of* 50 cents, &c., on each 100 *kilograms* (220 pounds) *gross*.

Nos.	Articles.	Duty (see note above).	Imports.	Duties paid.	Remarks.
			United States coin.	*Mexican coin.*	
(1) 1	Accordeons and harmonicas	F. and 50 cents			Very small.
(74) 2	Anvils	Anvils F. and 50 cents And anvils, square block iron, kilograms,* 10 cents and 50 cents.	Not stated		Do.
(8) 3	Asbestus, for roofs	55 per cent. and 75 cents	N. S		Do.
(12) 4	Bars of steel for mines, round and octagonal.	F and 50 cents	Est. $8,000	Est. $364	Small; mostly from Europe. From United States bar iron, pounds 364,689, $16,281, of which perhaps half was for mines.
(22) 5	Barrows and hand trucks, with one or two wheels.	F. and 50 cents	N. S		Very small, except for railways.
(36) 6	Bricks, refractory, and all kinds of bricks.	Free	$692		No change. Free by law of May 26, 1882.
(38) 7	Books, printed, unbound, or bound, in whole or in the greater part with paper or cloth.	F. and $1	$27,254	Est. $1,500	Books *of all kinds*.
(73) 8	Beams, small, and rafters of iron for roofs, provided they cannot be made use of for other objects in which iron is employed.	F. and 50 cents	N. S		Very small.
(19) 9	Coal of all kinds	Free	$76,022		No change. Anthracite, 9,545 tons, $45,470. Bituminous, 7,028 tons, $30,552. Total, 16,573 tons.
(21) 10	Cars and carts with springs	Carts, 2 wheels each, $3	N. S		Very small.
(23) 11	Coaches and cars for railways	Free	$579,421		No change. Cars, &c., 838.
(24) 12	Crucibles and melting-pots of all materials and sizes.	F. and 50 cents	N. S		Not important.
(25) 13	Cane-knives	F. and 50 cents	N. S		Very small.
(63) 14	Clocks, mantel or wall	*K. 86 cents and 75 cents or 29 cents and 50 cents.	$39,623	Est. $5,000	Fine, not of gold or silver; K.* 86 cents and 75 gross weight. Ordinary, with or without wood case, K. 29 cents and 50 cents gross weight. This is a valuable concession. Trade will greatly increase, perhaps to more than $100,000.

*Kilo = 2⅕ lbs.

26)	15	Diligences and road carriages of all kinds and dimensions: Carriages according to class, each	$66, $88, $132, $176, $396	$178, 015	Est. $175, 000	This should include: 1. Carriages of two wheels, each $66 or $88. 2. Carriages and coupés, each $132 or $176. 3. Carriages as landaus, &c., each $396. 4. Wagons and carts, each $66 or $33.
		Suggested definition in place of above: Wagons and carts, each	$60 or $33			All these come under the heading, but to make the matter plainer the title should be amended so that none of the above could be ruled out as not being a "road carriage." I suggest an amended definition—see column of articles. Thus construed this is a very valuable concession. The trade might easily run to $500,000, and it would be a great convenience on the frontier.
		Diligences, carriages, and wagons of all kinds and classes.	$66 or $33 and 50 cents			
(27)	16	Dynamite	F. and 50 cents	N. S.		Small.
(14)	17	Fire-pumps, engines, and ordinary pumps for irrigation and other purposes.	F. and 50 cents	$13, 475	Est. $1, 300	A small reduction, but facilitates trade.
(40)	18	Faucets per kilogram	19 cents and 50 cents	N. S		Small.
(47)	19	Fuse and wick for mines	F. and 50 cents	N. S		Do.
(53)	20	Feed, dry, and straw	F. and 50 cents	N. S		Do.
(29)	21	Fruits, fresh	F. and 50 cents	Est. $15, 000	Est. $2, 500	Apples, 7,696 barrels, $9,542; other, green, ripe, or dried, $19,207.
(37)	22	Firewood	55 per cent. and 75 cents	N. S		Very small.
(54)	23	Fish, fresh	55 per cent. and 75 cents	N. S		Do.
(30)	24	Guano	F. and 50 cents	None		
(6)	25	Hoes, mattocks, and their handles	F. and 50 cents	N. S		See No. 40.
(16)	26	Houses of wood or iron, complete	F. and 50 cents	N. S		Small.
(17)	27	Hoes, common agricultural knives without sheaths, scythes, sickles, harrows, rakes, shovels, pick-axes, spades, and mattocks for agriculture.	F. and 50 cents	N. S		See No. 40.
(66)	28	Henequen bags, on condition that they be used for subsequent exportation of Mexican products.	55 per cent. and 75 cents	N. S		Small value, but a convenience.
(31)	29	Ice	F. and 50 cents	None		Some trade might be developed by this change.
(32)	30	Iron and steel, made into rails, for railways.	Free	$66, 260		No change; 1,531,075 pounds.
(34)	31	Instruments, scientific	F. and $1	N. S		See No. 40.
(68)	32	Inks, printing	F. and 50 cents	N. S		Not large.
(72)	33	Iron beams per kilogram	6 cents and 50 cents	N. S		Do.
(15)	34	Lime, hydraulic	F. and 50 cents	$9,753	Est. $2, 000	Lime and cement, 3,349 barrels.
(39)	35	Locomotives	Free	$647,117		No change; number of locomotives, 53.
(56)	36	Lithographic stones	F. and 50 cents	N. S		Small.
(7, 46)	37	Masts and anchors, for vessels large or small.	Free	Est. $40, 000		No change.

TABLE B.—*Statement of the articles, duties, imports, &c.*—Continued.

Nos.	Articles.	Duty.	Imports.	Duties paid.	Remarks.
			United States coin.	*Mexican coin.*	
(41) 38	Marble in blocks	55 per cent. and 75 cents	$312	Est. $200	Small.
(42) 39	Marble in flags for pavements not exceeding 40 centimeters (15.75 inches) in square, and polished on only one side.	F. and 50 cents	N. S		Small. Manufactures of marble, $12,330, of which little or none was of this class.
(54) 40	Machines and apparatus of all kinds for industrial, agricultural, and mining purposes, science and art, and any separate extra parts and pieces pertaining thereto. The extra or separate parts of machinery, and the apparatus that may come united or separately with the machinery, are included in this provision, comprehending in this the bands of leather or rubber that serve to communicate movement, but only when imported at the same time with the machinery to which they are adapted.	F. and 50 cents	Est. $150, 000	Est. $12, 500	I include herein: Fanning mills, 3, $80; horse-powers, 2, $330; mowers and reapers, 12, $1,535; plows and cultivators, 1,234, $13,910; all other agricultural implements, $73,283; mathematical, philosophical, and optical instruments, $23,952; total, $113,090. Not classed, enough to make $150,000. Some value to this concession and a great convenience on the frontier.
(48) 41	Metal, precious, in bullion or in powder	Free	None		No account.
(50) 42	Money, legal, of silver or gold, of the United States.	Free	N. S		Do.
(49) 43	Moulds and patterns for the arts	F. and 50 cents	N. S		Small. (See No. 40.)
(51) 44	Naphtha	88 per cent. and 80 cents	$6, 337	Est. $6, 500	40,335 gallons, includes benzine, gasoline, &c. This item might increase to $25,000.
(9) 45	Oats, in grain or straw	F. and 50 cents	10, 499	Est. $1, 072	15,319 bushels; valuable on the frontier.
(64) 46	Oars for small vessels	F. and 50 cents	N. S		Very small.
(5) 47	Plows and plowshares	Free	See No. 40		No change.
(52) 48	Paper tarred for roofs	55 per cent. and 75 cents	N. S		Very small.
(57) 49	Plants and seeds, of any kind, not growing in the country, for cultivation.	F. and 50 cents	$1,509	Est. $75	Do.
(68) 50	Pens, of any metal, not silver or gold	Kilo., 86 cents and 75 cents	N. S		Now very small, but would increase.
(59) 51	Petroleum, crude	88 per cent. and 80 cents	$3, 705	Est. $3, 935	Mineral oil, crude. Valuable trade would increase, as the demand is increasing.
(60) 52	Petroleum and coal oil, and its products for illuminating purposes.	No leakage; net weight per kilogram,* 9 and 50 cents.	$226,115	$472,045	1,472,766 gallons; this is a very important concession, and might easily run the trade up to $1,000,000 per annum. The present duty of, say, 32 cents per gallon, is so high as to prohibit the general use, and the removal of the duty and the increased demand would make a great increase. It would afford a new and important foreign market for American petroleum.

(62) 53	Powder, common, for mines	F. and 50 cents	Est. $100,000	Est. $1,135	Mining powder is not stated separately. "Gunpowder," 1,200,674 pounds, $226,125.
(10) 54	Quicksilver	Free	$316,714		No change.
(70) 55	Rags or cloth for the manufacture of paper.	F. and 50 cents	None		No account.
(67) 56	Roof tiles of clay or other material	Per M, $1.65 and 50 cents	N. S		Very small.
(11) 57	Sulphur	F. and 50 cents	N. S		Do.
(13) 58	Stoves of iron, for cooking and other purposes.	K.* 29 and 50 cents, or K.,* 19 and 50 cents.	$9,559	Est. $9,000	With outfits, with ornaments of brass, gross weight, per kilogram, 29 and 50 cents; without ornaments of brass, gross weight, per kilogram, 19 and 50 cents. The Mexican demand for stoves has been very small, but within a few years it has increased. Most have come from France and England. With the change the United States trade might easily run to $100,000 within a few years.
(28) 59	Staves and headings for barrels	F. and 50 cents	$4,503	Est. $225	Not important.
(33) 60	Soda, hyposulphite of	F. and 50 cents	N. S.		Small.
(43) 61	Steam engines	F. and 50 cents	$27,726	Est. 2, 500	Stationary engines. Weight duty is nearly 20 per cent.
(44) 62	Sewing-machines	F. and $1	$305,595	Est. 15, 000	While the change would not make much money difference, yet it would be a great trade convenience.
(61) 63	Slates for roofs and pavements	Free	N. S		No change. Very small.
(65) 64	Sausages, large or small... net kilo	24 cents and 50 cents	N. S		Small. Mostly come from Europe.
(20) 65	Teasels of wire, mounted on bands for machinery, or vegetable teasels.	F. and 50 cents	N. S		Small.
(35) 66	Tools and instruments of steel, iron, brass, or wood, or composed of these materials for artisans, per kilogram.	Gross wt., 19 cents and 50 cents.	Est. $200,000	Est. $25, 000	Edge tools, $179,452. Files and saws, $6,166, not stated, say, $14,382. Valuable concession.
(69) 67	Types, coats of arms, spaces, rules, vignettes, and accessories for printing of all kinds.	F. and 50 cents	Est. $15,000	Est. 1,500	Printing presses and types, $37,594.
(71) 68	Vegetables, fresh:				
	Potatoes and onions, per kilogram	2 cents and 50 cents	$39, 186	Est. $4, 000	Onions, 6,765 bushels, $7,976; potatoes, 24,536 bushels, $28,835; other vegetables, $2,275. This trade would considerably increase, and the change would be a great convenience on the frontier.
	Other vegetables, fresh	F. and 50 cents			
(2) 69	Wire, telegraph, the destination of which will be proven at the respective custom-houses by the parties interested.	F. and 50 cents	Est. $5, 000		
(3) 70	Wire, of iron or steel for carding, from No. 26 upwards.	F. and 50 cents	N. S		Small.
(4) 71	Wire, barbed, for fences and the hooks and nails to fasten the same, per kilogram.	Gross wt., 2 cents 50 cents	N. S		At present this is a small item, the duty of about 1 cent per pound hinders its increase. But the demand must grow rapidly and with the change might easily reach $100,000 per annum. Wood is scarce, and ranchmen and railways will need to fence large acres in a few years.

---

* Kilogram = 2⅕ pounds.

TABLE B.—*Statement of the articles, duties, imports, &c.*—Continued.

Nos.	Articles.	Duty.	Imports.	Duties paid.	Remarks.
			United States coin.	*Mexican coin.*	
(18) 72	Water-pipes of all classes, materials and dimensions, not considering as comprehended among them tubes of copper or other metal that do not come closed or soldered with seam or with riveting in all their length.	F. and 50 cents	N. S.		Not imported at present.
(55) 73	Window-blinds, painted or not painted, per kilogram.	Gross wt., 29 cents and 50 cents.	N. S		Not important. If it were window-frames it would be of some account.

SUMMARY.

Total value of imports stated in this list, United States coin	$3, 117, 592
Value of imports now free of duty, United States coin	1, 726, 226
Value of imports which have only a weight duty and which are classed as "so-called free," United States coin	693, 514
Value of imports in the free list, and in the so-called free list, United States coin	2, 419, 740
Value of imports now dutiable, United States coin	697, 852
Value of duties remitted by treaty and consequent loss to Mexican revenue, *Mexican coin*	742, 351
Same reduced to United States coin at 90 cents on the dollar	668, 116

COMMENTS ON THE TABLES

Table A, briefly stated, shows that the United States concedes the duties on five articles, as follows:

TABLE C.

Nos.	Articles.	Imports.	Duties paid.
(5) 25	Sugar	$102,147	$75,000
(16) 10	Henequen, &c	2,067,676	48,207
(20) 15	Istle .... est.	250,000	32,500
(28) 26	Tobacco in leaf	31,150	18,487
(15) 8	Fruits .... est.	20,000	4,000
	Total	2,470,973	178,194

Istle fiber is rated full high.

The imports and duties are more likely to be less than to be more than I have given.

Tobacco leaf might increase considerably, but not enough to affect the price in the United States.

Fruits are not at all important.

SUGAR.

This article has provoked more discussion and opposition in the United States than all the rest of the list. To show more fully what effect the change in sugar would have, I give a table showing the imports of brown sugar into the United States for the year ending June 30, 1882.

TABLE D.

Counties.	Quantities.	Values.
	Pounds.	
Brazil	228,683,398	$8,446,779
French West Indies	59,952,340	2,385,578
British West Indies	70,044,291	2,902,845
British Guiana	64,457,685	3,192,659
Cuba	1,107,578,529	53,297,787
Mexico	2,931,649	102,147
Porto Rico	78,768,975	3,392,855
Other countries	261,132,189	9,426,485
Hawaiian Islands (free by treaty)	106,181,858	6,918,083
Total dutiable	1,873,546,056	83,147,135
Grand total	1,979,727,914	90,065,218

This is about 39⅗ pounds to each inhabitant of the United States. The United States in the same time exported of refined sugar 13,761,069 pounds, leaving about 39⅓ pounds per capita as the annual net imports into the United States.

A little more than one-tenth of one per cent. of all the imports came from Mexico, or say one ounce per capita. The proposed treaty would reduce the United States revenues on sugar imports about one-tenth of one per cent.* It has, however, been claimed that under this treaty the production of sugar would greatly increase and the concession come to be much more valuable than now. It is beyond question that the adoption of the treaty would increase the sugar exports from Mexico to the United States. It would also tend to turn all Mexican sugar exports to the United States. To what amount the proposed treaty would bring this trade is the point of interest.

---

* Year ending June 30, 1880, the United States produced 178,872 hogsheads, of which Louisiana produced 171,706 hogsheads, Texas 4,951, and Florida 1,273.

The sugar exports of Mexico to all countries for the past five years reduced to United States coin at 90 cents on the dollar, about the legal rate, (which is at least 5 per cent. more than the commercial rate) were as follows:

TABLE E.

Years ending June 30:	
1878	$251,622
1879	217,173
1880	445,803
1881	286,143
1882	239,468

In the last year the total exports are less than $250,000, and sugar stands ninth on the list.

The exports are seen to be quite irregular, but to be about $12,000 less in the last year than in the first.

There is a considerable area in Mexico which is well adapted to the production of sugar. A reduction of, say, 2½ cents per pound, and to so great a market as the United States, will be a great advantage. It is probably equal to 50 per cent. increase in selling price. But there are great difficulties in the way of sugar growing in Mexico. Labor, irrigation, malarial and other fevers—risks incidental to placing large capital so far away from home—export duties, and local taxation, are all serious problems.

Mexican labor cannot be wholly depended upon, and it will be very difficult to get foreign labor in sufficient numbers to endure the climate of the sugar-growing sections.

Irrigation is not only expensive, but there will often be a lack of water to draw from.

The health problem may in bad years be more important than any other.

To make any change in the sugar product large capital must be drawn from abroad, and it may be difficult to get sufficient capital at profitable rates.

The several States have never given up to the general government the right to enforce export taxes. In some States, notably that of Vera Cruz, the chief sugar-producing State, this duty has been so great as to seriously embarrass planters and to prevent others from starting plantations.

Until some definite law be passed there can be no security that this export tax will not be increased from time to time so as to cut off all profits and ruin the planters. As the States are usually hard up for funds there will always be a good excuse for taxing anything from which funds can be readily obtained.

All these difficulties will have to be met besides some race prejudice, the difficulties of the Spanish language, the uncertainty of justice, and risks of civil disorders.

There is another and a very important point to be considered. An increase in the sugar growing will encourage the immediate erection of refineries in Mexico, the products of which will find a ready home market. These refineries might be very profitable, and seriously reduce the *exports of* crude sugar, and proportionately reduce the American exports *of* refined sugar to Mexico.

A consideration of these points will enable each person to estimate the possible development of the sugar industry. That it might double or treble within six years seems to me highly probable. Any further estimate would be mere guesswork.

As stated, this list practically affects five Mexican raw products and will aid in increasing the resources of Mexico by their increased production. None of these articles can, apparently, compete so as to affect prices in the United States.

Table B, briefly stated, shows that Mexico concedes the duties on twelve articles, as follows:

TABLE F.

Nos.	Articles.	Imports.	Duties paid.
(60)52	Petroleum	$226,115	com. $472,045
(26)15	Carriages, &c	173,015	est. 175,000
(35)66	Tools, &c	est. 200,000	est. 25,000
(44)62	Sewing-machines	305,595	est. 15,000
(45)40	Machines, &c	est. 150,000	est. 12,500
(13)58	Stoves	9,559	est. 9,000
(51)44	Naphtha	6,337	com. 6,500
(63)14	Clocks	39,623	est. 5,000
(71)68	Vegetables	39,186	com. 4,000
(59)51	Crude petroleum	3,705	com. 3,935
(43)61	Steam-engines	27,926	est. 2,500
(29)21	Fruits	est. 15,000	est. 2,500
	Totals	696,061	732,980

It will be noted that the duties paid are distinguished as computed or estimated. Those marked "computed" are computed from known weights or quantities, as petroleum. Those marked "estimated" are also computed, but from less exact data. Care has been taken that all computations should be as nearly correct as possible.

The "duties paid" in this table are usually full low rather than too high.

The most important article is seen at once to be petroleum for illuminating purposes. Relieved of the payment of about 32 cents per gallon, the present duty, this item would immediately increase to large proportions, and steadily grow. It would also stop any immediate development of possible oil districts in Mexico. As the petroleum trade in the United States is in great need of new markets, this provision would be very valuable.

Next in importance are carriages, &c. The effect of this clause would be to open up all Mexico as a market to our carriage and wagon makers. Woods having the requisite hardness, toughness, and elasticity are so rare in Mexico that competition with the United States builders will be impossible. The whole wagon and carriage supply will be in the hands of American manufacturers. The possible limits of the trade are, of course, unknown, but the removal of an average duty of fully 100 per cent. must have a marked effect.

The next three articles on the list are now on the so-called free list, having only a weight duty.

The change would be of importance more as a convenience than for the money change. The change in stoves, clocks, and vegetables would be of considerable value to those articles.

Indeed, as the United States develops we will see the need of utilizing each item of our export trade, and making it contribute its share to the general prosperity. Even the seemingly unimportant concessions in this treaty may be found valuable.

To show in convenient form the comparative concessions conceded by the two countries in the treaty under discussion, I give the following:

TABLE G.

Duties conceded by—					
United States.			Mexico.		
(5) 25	Sugar	$75,000	(60) 52	Petroleum	$472,045
(16) 10	Henequen, &c	48,207	(26) 15	Carriages, &c	175,000
(20) 15	Istle	32,500	(35) 66	Tools, &c	25,000
(28) 26	Tobacco leaf	18,487	(44) 62	Sewing machines	15,000
(15) 8	Fruits	4,000	(45) 40	Machines, &c	12,500
	All others	881	(13) 58	Stoves	9,000
			(51) 44	Naphtha	6,500
			(63) 14	Clocks	5,000
			(71) 68	Vegetables	4,000
			(59) 51	Crude petroleum	3,935
			(43) 61	Steam-engines	2,500
			(29) 21	Fruits	2,500
				All others	9,731
	Total	179,075		Total	742,351
	Difference in favor of the United States (United States coin)	489,041		Reduced to United States coin at 90c	668,116

WARNER P. SUTTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Matamoros, August 11, 1883.

TREATY BETWEEN MEXICO AND GERMANY.

REPORT BY MINISTER MORGAN.

I transmit herewith a copy of the treaty between Mexico and the Emperor of Germany, as published in the "Diario Oficial" of the 13th instant; also a translation thereof.

The ratifications of the treaty were exchanged at this capital on the 26th of July last.

P. H. MORGAN.
Minister Resident.

LEGATION OF THE UNITED STATES,
Mexico, August, 14, 1883.

DEPARTMENT FOR FOREIGN RELATIONS.

The President of the Republic has seen fit to transmit to me the following decree:

MANUEL GONZALEZ, President of the United States of Mexico, to the inhabitants thereof:

Know ye:

That on the fifth day of December, eighteen hundred and eighty-two, in this city, the federal capital of Mexico, between the plenipotentiaries duly authorized to that effect, was celebrated a treaty between the United States of Mexico and the German Empire, of the form and tenor following:

The United States of Mexico of the one part, and His Majesty the Emperor of Germany, King of Prussia, in the name of the German

Empire, reciprocally wishing to consolidate and encourage their relations and interests, have determined upon making a treaty of friendship, commerce, and navigation.

To this end they have appointed their respective plenipotentiaries, viz:

The President of the United States of Mexico has appointed Senator D. Genaro Raigosa, and His Majesty the Emperor of Germany, King of Prussia, has appointed his minister resident to the United States of Mexico, Ernesto Luis Carlos, Baron de Waecker-Gotter.

Who, after having communicated to each other their respective full powers, have agreed upon the following articles.

ARTICLE I. There shall exist a firm and inviolable friendship between the United States of Mexico on the one part, and the German Empire on the other, as well as between their respective citizens or subjects.

ART. II. There shall also exist a reciprocal liberty of commerce and navigation between the contracting parties. The citizens or subjects of each may freely engage therein, and in perfect security, with their vessels and cargoes, in all the towns, ports, and rivers of the other where entry is now or may hereafter be permitted to the citizens or subjects of the most favored nations. They may in said places and in any other parts of the country permanently reside and establish themselves, occupy and lease houses, warehouses, or other locations in which to carry on a commerce, whether wholesale or retail, enjoying the same rights, liberties, and exemptions which are now or may hereafter be enjoyed by the citizens or subjects of the most favored nations, and they shall submit themselves to the laws and regulations of the country in which they reside.

ART. III. The vessels of war belonging to each of the contracting parties shall be allowed to enter, without obstruction and in security, all the ports, rivers, and places of the other party, where the vessels of war of the most favored nations are now permitted to enter, and shall, while there, receive the same treatment.

ART. IV. Merchant vessels of each of the contracting parties, shall have the right, always submitting themselves to the laws and regulations existing in the territory of the other party, to carry cargo for one or more ports thereof, and to load the same, without being subjected to the payment of higher or other duties and without being subjected to other formalities than those which are paid by and exacted of, or which may hereafter be paid by and exacted of, merchant vessels belonging to the most favored nation.

It is agreed that the concession does not extend to coastwise commerce, which in the territory of the contracting parties is only permitted to the vessels of their respective nationalities. But if either should hereafter permit, in whole or in part, the coastwise trade to one or more nations, the other party shall have the right to claim for its citizens or subjects the concessions and privileges given in this regard to the citizens or subjects of the most favored nations: under the condition that, on its part, it will concede a reciprocity in everything which is claimed in this sense.

ART. V. There shall not be imposed upon the vessels of the contracting parties in the ports of the other, on their entry or departure from, or during the time they may remain therein, other or higher duties, charges or fees to public functionaries on account of tonnage, lighthouses, port (duty) pilotage, quarantine, salvage and assistance in case of shipwreck, nor other general or local costs and duties of any class or denomination, than those which are paid or which may hereafter be paid by the vessels of the most favored nation.

The capacity of the vessel as stated in her register shall serve as the basis upon which the rights and tonnage duties are to be calculated.

It is understood that by ports of either of the contracting parties, as used in this and other articles of this treaty, is meant those which are now, or which may hereafter be, opened by the respective Governments to import and export commerce.

ART. VI. The steamers of each of the contracting parties which may be engaged in making stated voyages between the two countries shall enjoy the same privileges in their entry, despatch, and sailing as are now or which may hereafter be conceded to the steamers of the most favored nation.

ART. VII. Each of the contracting parties shall consider, and treat as vessels of the other, those which navigate under the flag thereof, and which carry the license and documents prescribed by the laws thereof which are necessary to establish the nationality of the vessel.

ART. VIII. In everything which relates to the police of the ports, to the loading and unloading of cargo of vessels, and to the security and custody of merchandise and effects therefrom, the citizens or subjects of the contracting parties shall be governed by the laws and regulations in force in the respective countries. In respect of Mexican ports, it is understood that the laws and regulations referred to are such as have been, or may hereafter be, dictated by the Federal Government, as well as to such local health laws of the local authorities. The two contracting parties agree to consider the respective boundary of their territorial coast line a distance of three marine leagues from the shore at low tide.

Nevertheless, this stipulation shall only refer to the vigilance and application of custom-house regulations and the steps taken to prevent smuggling, and cannot be extended to other questions arising under international maritime law. It is also understood that the extension of maritime territory cannot be applied by one or other of the contracting parties to the vessels of the other, except in the case that the first shall treat in the same manner the vessels of every other nation with which it may make treaties of commerce and navigation.

ART. IX. Every article of commerce, without reference to its origin, imported into the territory of either of the contracting parties which is, or may be hereafter, permitted on the vessels of the most favored nations, may also be imported on the vessels of the other contracting party, whatever may be the country from which said vessels may proceed, without the payment of other or higher duties than those which in the future may be paid by vessels of the most favored nation. The same principle shall be applied to exportation or re-exportation, whatever may be the country to which the vessels are destined.

ART. X. No other or greater duties shall be imposed in the territory of either of the contracting parties upon the importation, re-exportation, or transportation of natural or manufactured production of the other party than those which are paid upon the same class of productions of the most favored nation.

Neither shall either of the contracting parties impose other or greater duties upon the exportation of articles of commerce to the territory of the other than those which are now, or which may hereafter be, paid upon the exportation of the articles of the same class to the territory of the most favored nation, and neither of the contracting parties shall prohibit the importation, export and transportation to the prejudice of the other party, unless this prohibition is extended at the same time to all other nations.

Should the Mexican Government alter its laws, rules, or customs tariff, it is agreed that, before such modifications are applied, sufficient notice shall be given to commerce to enable it to conform its operations thereto, and every case of innocent infraction thereof shall be equitably determined.

ART. XI. Whenever citizens or subjects of either of the contracting parties shall be under the necessity of taking refuge with their vessels in any of the ports, bays, rivers, or territory of the other from stress of weather or from any other cause, they shall be received and humanely treated, under such precautions as may be deemed necessary on the part of the respective Governments to prevent frauds; conceding to them every favor and protection to enable them to repair the damages which they may have suffered, affording them provisions, and placing them in a position to continue their voyage, without obstacle or impediment of any kind. It shall be permitted in the territory of either of the contracting parties, that the merchant vessels of either whose crews have been diminished by sickness or from whatever cause, to ship such sailors as may be necessary to enable them to continue their voyage; provided that in so doing they conform to the local laws and regulations, and that the shipping is voluntary on the part of the sailors.

ART. XII. Should vessels belonging to citizens or subjects of either of the contracting parties suffer shipwreck, be sunk or suffer damage on the coasts or within the jurisdiction of the other, the same assistance and protection shall be given to them as is usually given to vessels of its nation, permitting them, when necessary to discharge their cargoes and effects under such precautions as may be deemed necessary on the part of the respective Governments to prevent fraud, without subjecting the cargoes or other articles saved, nor for their discharge or reshipment, to any duties, imports, or contributions, except they be destined for consumption in the interior.

ART. XIII. The citizens and subjects of each of the contracting parties shall enjoy, in the territory of the other, in respect of their persons, property, professions, industries, and business, as well as in their religion, the same guarantees and rights as are now, or which may hereafter be, guaranteed to the citizens or subjects of the most favored nation. They shall have free and easy access to the tribunals to assert and defend their rights or interests; and besides, in everything appertaining to the administration of justice, they shall have the same rights, recourses, and be under the same obligations as citizens or subjects of the country.

ART. XIV. Citizens or subjects of each of the contracting parties shall not be subjected, in the territory of the other, to other, or greater taxes, contributions, or levies than those which are paid by the subjects or citizens thereof. They shall be exempt from all service in the army, navy, or militia or national guards, from every contribution, either in coin or in goods, destined to the maintenance of such service, from forced loans and exactions, requisitions and contributions, for war purposes, except those which are imposed upon the real estate of the country, in which case they are to be paid in the same manner as they are paid by the citizens or subjects of the country. The vessels, crews, merchandise, and other effects cannot be taken or detained for any military expedition, nor for any other public service whatever, without previous indemnification upon a just and equitable basis.

ART. XV. Citizens and subjects of each of the contracting parties shall have the right to acquire and possess personal property in the territory of the other upon the same terms as it may be acquired and possessed by the citizens or subjects thereof. In respect of real estate, it may be acquired and possessed in conformity with the dispositions of the laws of the country. As respects the right to dispose of their property by sale, exchange, donation, last will, or any other mode, and in everything which relates to the succession of personal property, by testament or *ab intestato;* the citizens or subjects of each of the contracting parties shall enjoy in the territory of the other the same liberty, rights, and obligations as the citizens or subjects thereof, without the payment in either of such cases or other greater taxes or duties than are paid by the citizens or subjects thereof. If a citizen or subject of one of the contracting parties inherits real estate situate in the territory of the other party which by reason of his being a foreigner he cannot possess under the laws of the country, he shall be allowed a period of three years, counting from the day which he may legally dispose of it as he may deem proper, and he shall be permitted to withdraw the products of the sale without any obstacle whatever and exempt from all right of detention on the part of the respective countries.

ART. XVI. Should unfortunately at any time hostilities break out between the contracting parties which shall interrupt the good relations of commerce, the citizens and subjects of each of the contracting parties who may be in the territory of the other shall have nevertheless the right to remain therein and to carry on the commerce, industry, or business, provided they live peaceably and without contravening the laws of the country. They shall continue to enjoy the rights and privileges accorded to them by Articles XIII, XIV, and XV of the present treaty, and their property cannot on this account be occupied, embargoed, or confiscated; neither can their credits against individuals nor the state, nor their mining stock, nor any other values, of whatever nature they may be.

ART. XVII. In respect of their relations in time of war, be it as belligerents or neutrals, the two contracting parties will observe the rules of international law, as they are recognized by civilized nations.

As relates to maritime international law especially, they reciprocally oblige themselves to observe the principles as ennunciated in the second, third, and fourth of the Declaration of the Congress of Paris of the 16th of April, 1856, with the sole reservation on the part of the United States of Mexico that when they are at war with a third power they will respect the enemy's merchandise which is under a neutral flag only in case said power has adopted the same principle of maritime international law in respect of Mexico.

ART. XVIII. The contracting parties agree to reciprocally concede to the envoys, ministers, and public agents the same privileges, exemptions, and immunities as those which are enjoyed, or which may hereafter be enjoyed, by those of the most favored nation. It is also agreed between both the contracting parties, animated with the desire to avoid discussions which might interrupt their friendly relations, that as regards reclamations or complaints of private individuals in matters of civil jurisdiction, either criminal or administrative, their diplomatic representatives shall not intervene except in case of denial or extraordinary or illegal delay of justice in default of the execution of a definitive judgment; or, legal proceedings having been instituted for an express violation of the treaties existing between the contracting parties, or of the rules of international law, public and private, as they are recognized by civilized nations.

It is also stipulated between the contracting parties, that the German Government will not pretend to make the Mexican Government responsible, except there has been fault or neglect of necessary diligence on the part of the Mexican authorities, or of their agents, for damages, vexations, or exactions occasioned in times of insurrections or civil war, to subjects of Germany in the territory of Mexico by parties of the insurgents, or which may be caused by tribes of savages who may be *subtracted* from obedience to the Government.

ART. XIX. Each of the contracting parties shall have the right to establish in the territory of the other consuls-general, consuls, vice-consuls, and consular agents, reserving to each the right to except such places in which it is not deemed expedient to establish them, provided such exception is extended to consular officers of other nations.

Consuls-general, vice-consuls, and consular agents will not be permitted to enter upon the discharge of their duties until they shall have presented, in due form, their commissions or certificates of appointment, and until they shall have had their exequaturs issued thereon. They shall enjoy the same rights, privileges, and exemptions which are now, or may hereafter be, enjoyed at their place of residence as consular officers of the same rank of the most favored nations.

ART. XX. The archives and papers of consular officers shall be considered as inviolable, and from no motive shall the authorities of the country embargo or take cognizance of them.

Consuls-general, consuls, vice-consuls, and consular officers and their clerks, always providing they are not citizens of the contracting party in whose territory they reside, shall be exempt from compulsory public service and from any purely personal contribution or tax. But if these functionaries possess real estate, or are engaged in business or pursue any industry in the territory in which they reside, they shall be, as respects such property, commerce, or industry, liable to the same charges and taxes as the citizens thereof, in as far as they do not come under the exceptions specified in Article XIX of this treaty. In every other respect they are subject to the laws of the country of their residence.

ART. XXI. Consular officers of both the contracting parties may require the assistance of the local authorities to carry out the measures which may be necessary within their attributions, to re-establish order on board of merchant vessels, as well as to search for, apprehend, and arrest, in case of desertion, persons belonging to the crew of marines of vessels of war or merchantmen of the country which they represent. To this end it is necessary that they should address, in writing, the competent authority and establish by the exhibition of the ships' registers, roll of the crew, or other official documents that the individuals claimed form part of the crew or marines. The demand having been justified, their return shall not be refused. As soon as the deserters shall have been arrested they shall be placed at the disposal of the party who has claimed them, and may be detained in the public prison, on the application and at the expense of those claiming them, to be sent on board the vessels from which they deserted, or to another vessel of the same nation. Nevertheless, if they shall not have been returned within three months from the day of their arrest, they shall be set at liberty, and they shall not be re-arrested for the same offense. And whenever a deserter has committed any act punishable in the territory of the contracting party which claims him, his return shall be deferred until the judgment of a competent court has been pronounced, and the final sentence thereof executed in all of its parts. It is understood that if the deserter is a citizen or subject of the contracting party in whose territory his arrest is asked for, the stipulations contained in the present article shall not apply.

ART. XXII. Both contracting parties agree to mutually concede in everything which refers to commerce, navigation, the exercise of consular functions, and the treatment of their respective citizens or subjects, shall enjoy the same rights and privileges which are or which may hereafter be conceded by the respective parties to the most favored nation.

ART. XXIII. The present treaty shall be ratified by the contracting parties, and the ratifications shall be exchanged, in the shortest delay possible, in the city of Mexico.

It shall remain in force for ten years, to count from the exchange of the ratifications thereof. In case twelve months before the expiration of this term neither of the parties shall have announced to the other its intention that it shall cease to be in effect, the treaty shall continue in force until one year after one or other of the contracting parties shall denounce it.

In faith of which the respective plenipotentiaries have signed the present treaty in duplicate and have sealed the same with their respective seals.

Done in the city of Mexico on the fifth day of December, eighteen hundred and eighty-two.

[L. S.] G. RAIGOSO.
[L. S.] ERNST LUDWIG CARL,
FRHR. VON WAECKER GOTTER.

That the foregoing treaty was approved on the fourteenth of December of the year above stated, of eighteen hundred and eighty-two, by the Senate of the United States of Mexico, in the following terms:

The treaty of friendship, commerce, and navigation celebrated between the President of the Republic and the Emperor of Germany on the 5th of December, 1882, as approved, Article 14 thereof being modified in the manner following:

> ART. 14. Citizens or subjects of each of the contracting parties shall not be liable, when in the territory of the other, to other or greater imposts, contributions, or charges than those which are paid by the citizens or subjects thereof.
>
> They shall be exempt from all personal service in the army, navy, and in the militia or national guards; from all contributions, whether in coin or in effects, for the support of either of these services; from forced loans; from charges, requisitions, and contributions for a foreign war, unless these shall be imposed or exacted upon the immovable property of the country, in which case they are to be paid in the same manner as by the citizens or subjects of the nation.
>
> The vessels, crews, and merchandise and other effects of the citizens or subjects of either of the contracting parties cannot, under any pretext, be taken or seized for any military expedition, nor for the public service, without previous indemnity made upon a just and equitable basis.

That in virtue thereof, and exercising the power conferred upon me by fraction X of article eighty-five of the Federal Constitution, I have ratified, accepted, and confirmed said treaty, with the modification thereto above expressed, on the fourteenth of the present month of July.

That it was also approved and ratified by His Majesty the German Emperor, King of Prussia, on the twenty-first of May of the present year.

And that the ratifications thereof were exchanged in this capital on the twenty-sixth of the month last passed.

Wherefore, I order you to print, publish, and circulate the same and give to it its effect.

Palace of the Federal Government, Mexico, 30th of July, 1883.

MANUEL GONZALEZ.

To Citizen José Fernandez,
Under Secretary in charge of the Department for Foreign Relations.

And I communicate it to you that it may produce its legal effects.

Liberty and Constitution.

Mexico, 31st of July, 1883.

JOSÉ FERNANDEZ.

COUNTERFEITING AMERICAN MANUFACTURES IN RUSSIA.

REPORT BY CONSUL VAN RIPER, OF MOSCOW.

I have the honor to call your attention to the question of American tools, of all descriptions, in Russia.

Having undertaken the task of doing my utmost, in my official as well as my business position here, to introduce American goods into this market, I received, among numberless other articles, several cases of miscellaneous tools of all descriptions, all of splendid workmanship, and not, as things go, at a high price; the shippers, in a praiseworthy spirit, allowing liberal discount to encourage trade.

I took these tools in hand, and visited *all* of the magazines or shops engaged in this trade, and almost without exception I encountered a so-called "American article" of German fabrication, with American trade-marks on them, but not the name of the American manufacturer. The tool was, of course, a very inferior article, and is offered at about 40 per cent. less than I could sell the American tool; and as the chief characteristic of the Russian is to buy where he can buy cheapest, regardless of quality, it shut me out entirely, and, as a last resort in order to have my superior tools introduced, I sold my samples to one or more of the leading dealers, thinking thereby that once in stock, and if by hazardsome sensible person would buy them, it would ultimately lead to a gradual introduction; I saw no other course open to me, and I have some confidence that it will be fruitful of results in time.

But, is there no remedy for this piracy of American trade-marks?

The Germans are the worst culprits in this respect; they are ashamed, with their miserable substitute, to place their name on their goods, but seem to have but the one desire, to discredit the good American article. I am doing all in my power, and vigorously, to counteract this pernicious influence, and believe that in time I will succeed.

I shall be glad to have any suggestions on the subject.

E. G. VAN RIPER,
Consul.

United States Consulate,
Moscow, August 1, 1883.

AMERICAN AGRICULTURAL MACHINERY IN ITALY.

REPORT BY DEPUTY CONSUL-GENERAL WOOD, OF ROME, ON THE EXHIBITION AND TRIALS OF AGRICULTURAL MACHINERY UNDER THE AUSPICES OF THE ITALIAN GOVERNMENT.

On the 26th of June last, at Grosseto, a town 118 miles distant from Rome, on the shore railway between Rome and Leghorn, was held, under the auspices of the Italian Government, an International Exhibition of reaping-machines and binders, followed by practical trials, made on the estates of three of the large landed proprietors of the place, the Signori Ricasoli, Ponticelli, and Luciani.

Although the number of machines exhibited was not large, general interest was excited among great land-owners, farmers, and agricultural societies, all of whom were well represented, as the most important attempt yet made in Italy toward solving the great agricultural problem of how to work malarial and comparatively uninhabited districts, such as the Tuscan sea-flats and the Roman Campagna, at the same time employing the least number of hands; the interest was also heightened by the novelty of three American machines. In fact, among the machines of Germany, Austria, England, France, and Belgium there exhibited were those of three well-known American firms, namely: Walter A. Wood, Messrs. Warder, Bushnell & Glessner, and McCormick. The machines of these three firms consisted of reapers and cord-binders, no wire-binders being admitted.

Walter A. Wood, represented by Engineer Edwards, of Milan, sent a skillful machinist and operator. Warder, Bushnell & Glessner were represented by the Chevalier Casimini, of Grosseto, but did not send out an operator, although one was promised; however, their machine was ably worked by a son of the Chevalier Casimini; the McCormick machine was worked by a Frenchman with great skill.

The commission and jury were composed of members of the Governmental Agricultural Commission and of the nominees of the minister of agriculture, among whom were: Prof. Tito Pasqui, Government superintendent of agriculture; Prof. Antonio Pacinati, dean of the Government School of Practical Engineering at Pisa, as chairman; and Prof. Vincenzo Testini, principal of the Government School of Practical Agriculture at Montepulciano in Tuscany.

The trials were long and varied, and the inequality of the ground and its variability from clayey, sticky soil to soft alluvial deposits, causing the wheels to sink deep below the surface, was too severe for most of the European competitors, but was one of the points in which the American machines showed their superiority, the three American reapers and binders working admirably, taking the ground as it came, easily overcoming all difficulties, and confirming the reputation of their makers.

After these practical trials, the jury, in order to form an exhaustive opinion, went so far as to examine every part and detail of the machinery with reference to its liability to wear out by friction and exposure, the quality of materials used, and the total weight, considering the facility of traction. This test was of the most thorough and searching nature, Professor Pacinati, a competent judge and practical engineer, directing the examination.

There were but two prizes offered for reapers and binders combined, which were allotted as follows: The jury unanimously awarded to Mc-

Cormick the first prize, consisting of 1,000 lire ($200), a gold medal, a diploma of honor, and the purchase of two machines by the Government, which machines will be sent to the Government dépôt of agricultural machinery at Florence and to the Government School of Practical Agriculture at Montepulcian. The second prize, of 500 lire ($100), a silver medal, and a diploma of honor, was awarded to Messrs. Warder, Bushnell & Glessner.

On the 6th of July, instant, another public trial of reaping-machines and binders was made under the auspices of the Government, on a large estate on the Roman Campagna, about six miles from the city of Rome, and with the same result as above; the agents of the minister of agriculture at that time working the purchased McCormick machines; the others were worked by their respective representatives.

Finally, on the 14th of July following, another great and well-attended trial was made on a large estate at Ciampino on the Campagna nine miles from Rome. On this occasion the Government put on one of its McCormick machines purchased at Grosseto; the Walter A. Wood machine was also engaged. Again the McCormick was declared to be the victor; the Wood machine worked well but accidentally broke some part of its machinery toward the close of the trial, and was thus obliged to stop.

This last trial, considering the character of the soil, was the most severe of all; the entire section of country is of volcanic origin; blocks of tufa, stone, and strata of *lapilli* are often met with to the great disadvantage of machine-work.

After the close of these trials, in conversation with Professor Pasqui, he repeatedly expressed to me his admiration of American machinery, and said that in future he hoped to see numerous contributions of our agricultural machinery and implements to the exhibitions of Italy.

In fact, considering the attention now being given to the use of labor-saving machines in Italy, I do not hesitate to say that this country offers a promising field, and American makers ought to take care that their machines be well represented, and what is quite as important, properly shown and worked at the chief fairs and trials of utility which are now frequently taking place, and at which, beside the land-owners and agricultural associations, the Government is a considerable encourager and patron.

It must here be remarked to the credit of the Italian Government, in its efforts to bring improved agricultural machinery into notice and use, that the machines sent to the foregoing exhibition and trials held under its auspices at Grosseto and Rome on June 26, July 6 and 14, 1883, were loaded, carried, unloaded, and returned free of expense to the exhibitors; the draught-horses and all other expenses also being paid for by the governmental agricultural commission.

CHARLES M. WOOD,
Deputy Consul-General.

UNITED STATES CONSULATE-GENERAL,
Rome, July 31, 1883.

COMMERCE OF THE DUTCH EAST INDIES, AND THE SHARE OF THE UNITED STATES THEREIN.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

On this subject I had the honor to make a report which was published in the monthly consular commercial reports of February, 1881, No. 4, and, as appears from a footnote thereto, was regarded as particularly valuable on account of its having been the first report on the subject ever received by the Department.

Thinking that further and later information relating to the course and volume of the commerce of the colonies might also be appreciated, I recently made another effort to enable me to present additional facts and figures respecting it, and such as I procured are herewith respectfully submitted.

By the minister of finance at the Hague I was kindly furnished with statements showing the value of the general imports and exports of merchandise and specie into and from the colonies in 1879 and 1880, and which are as follows, viz:

A.—MERCHANDISE, 1879.

On account of—	Value of the—		Inclusive value of—	
	Imports.	Exports.	Imports from United States.	Exports to United States.
	Florins.	*Florins.*	*Florins.*	*Florins.*
Private individuals	128, 028, 517	134, 376, 714	6, 689, 131	12, 502, 69
The Government	8, 640, 039	37, 382, 782	408, 245	....
Total	136, 668, 556	171, 759, 496	7, 097, 376	12, 502, 69

B.—SPECIE.

On account of—	Imports.	Exports.
	Florins.	*Florins.*
Private individuals	11, 482, 860	3, 984, 770
The Government	6, 500, 000	....
Total	17, 982, 860	3, 984, 770

NOTE.—No specie was imported from or exported to the United States.

A.—MERCHANDISE, 1880.

On account of—	Value of the—		Inclusive value of—	
	Imports.	Exports.	Imports from United States.	Exports to United States.
	Florins.	*Florins.*	*Florins.*	*Florins.*
Private individuals	145, 220, 899	138, 109, 987	7, 770, 094	15, 556, 136
The Government	12, 514, 860	37, 177, 478	347, 014	....
Total	157, 735, 759	175, 287, 465	8, 117, 108	15, 556, 136

B.—SPECIE.

On account of—	Imports.	Exports.
	Florins.	*Florins.*
Private individuals	12, 253, 161	3, 667, 389
The Government	3, 425, 000	....
Total	15, 678, 161	3, 667, 389

OTE.—No specie was imported from or exported to the United States.

On comparing the figures representing the value of the general imports and exports of 1879 and 1880 with those of 1878, there appears an increase in the imports of 1879 amounting to 20,697,902 florins, and of the still larger amount of 41,765,105 florins for the year 1880, whereas the exports show a slight falling off, amounting to 730,820 florins in 1879, and those for 1880 again a small increase of 2,797,149 florins over the exports of 1878.

The most noteworthy feature in the course of the commerce during the years covered by the above statistics consists of showing so large an increase in the imports from year to year, whilst the exports, so far as their value is concerned, increased but little in 1880, and amounted to even less in 1879 than 1878.

So much as relates in the foregoing tabular statement to the share of the United States in the commerce of the Dutch Indies appears rather favorable, as both the imports from and the exports to our country increased considerably and regularly during the period in question.

Whilst the imports from the United States amounted to but 4,030,669 florins in 1878, and the exports to 11,815,232 florins, they ran up, the former to 7,097,376 florins and the latter to 12,502,697 florins, in 1879, and in 1880 to 8,117,108 florins and to 15,556,136 florins respectively.

In this connection I would call attention to the fact that the value of the exports from the colonies to the United States as given in the above tables does not embrace the value of the indirect exports of India products, such as coffee, tobacco, tin, rice and spices, &c., which reach our country from the Netherlands, England, and other countries; neither does the value of the imports into the colonies, as therein stated, contain the whole value of the same coming to the colonies from the United States, as products and manufactures of our country are also occasionally shipped there from Holland and England.

I regret not being in possession of information or material from which to deduce whether the total foreign commerce of the colonies has since 1880 increased or decreased.

I can, however, state that the imports of petroleum from the United States were very much larger in 1882 than during any previous year.

Regarding transactions in manufactures of cotton, which always constitute an important part of the entire trade of that section, I managed to obtain an official statement showing the quantity of certain articles which were entered for the payment of duties at the various ports of the colonies in 1879 and in 1882, respectively. It was as follows, viz:

Articles.	Imported in 1879.	Imported in 1882.
Madapollams .... pieces.	490, 554	475, 501
Calicoes .... do....	811, 790	930, 596
Cambrics .... do....	2, 462, 584	2, 897, 417
Drillings:		
White .... do....	74, 072	50, 184
Brown .... do....	532, 051	595, 897
Shirtings, bleached .... do....	224, 785	240, 156
Total pieces cotton	4, 597, 836	5, 189, 751
Unbleached yarns .... kilograms..	267, 042	413, 553
Colored yarns .... do....	488, 209	562, 652
Total .... do....	755, 251	976, 205

My observations on the subject of the trade in cotton fabrics, as contained in my former report, still hold good in all particulars, and I would therefore again refer to them.

Certain recent changes in our tariff are found to be quite favorable for enlarging the formerly existing demand in American markets for quite a number of articles, the product of the colonies.

This is clearly evident, from the fact that within a few months last past considerable quantities of tin and spices, &c., have been shipped from this port, and, as I understand, also from England to the United States.

I am not prepared to say, positively, that the direct exports from the colonies to our country have lately also been larger than formerly, but am strongly inclined to believe that they have increased considerably.

As a consequence of this state of things, I can discern that there prevails, at this time, a more favorable disposition on the part of merchants here interested in the colonial trade, and, I have good reasons to believe, also on the part of merchants in the colonies, generally to extend commercial transactions with the United States.

The present, therefore, seems a most opportune time for our producers, manufacturers, and exporters to make well-directed efforts for securing a better footing in the Dutch colonial markets for the sale of different articles, the produce and manufacture of the United States.

As to what should be the nature of the efforts to be made to effect this desirable purpose, I would again call attention to suggestions from me on this point, and contained in my former report on this subject and already above referred to.

I would, however, now point out the advisability to American houses, earnestly intent on extending their trade in that direction, to form partnerships with already existing first-class firms in the colonies.

I am persuaded to believe that this can be done, and, if so, would, in my opinion, speedily result in great and permanent advantages to those who may undertake and accomplish it.

Considerable attention has recently been attracted, and some concern is felt, on the part of those directly interested in the commerce of Java and Sumatra, by reports coming from there, and respecting the great and frequent losses sustained by importers and wholesale dealers, in consequence of the ever-increasing number of failures of Chinese merchants in that country. This seems to be a rather serious matter, and its injurious effects upon the general condition of the islands are said to be far-reaching, as quite an important part of the trade, especially in the interior of those islands, is in their hands. The worst feature of this state of things is claimed to be that those Chinese merchants there so often confess themselves or have themselves declared to be insolvent, fail or make assignments, when their financial affairs in no way justify it, but just because it affords them a chance to obtain settlement of their liabilities for one-half or one-third of whatever they may be.

It is said that this matter is surrounded and aggravated by a combination of most peculiar circumstances, and involves many points which present great difficulties and perplexities, both to the European merchants and to the courts. There is now much said and written on this subject with a view, apparently, of laying bare the cause or causes of this outward state of affairs, and for the purpose of remedying it by legislation or otherwise, if possible.

What, however, is said to do far greater injury to commerce and trade, and retards the greater progress and prosperity throughout nearly the entire possessions of the Netherlands in the East Indies, is the inveterate and ruinous use of opium, and to some extent, also, the indulgence of the natives in their propensity for gambling.

I am assured by highly intelligent persons, who have resided in the colonies for extended periods of time, who investigated and seem thoroughly to know and understand this subject, that the loss to the country, annually, directly and indirectly, arising from the excessive use of opium alone, by natives and Chinamen, is enormous, amounting to many millions of florins.

It is clearly evident, they say, that it weakens and very much diminishes the producing capacities of the native inhabitants and Chinamen, nearly all of whom are cultivators of the soil, or in one way or another engaged in developing the country's resources by physical labor.

The natural consequence of this is that it very greatly prevents the larger consumption of foreign products and manufactures, necessitating the use of inferior and cheap articles, because it reduces the purchasing capacity of the population.

I am aware that by touching upon this subject I am treading on very delicate ground, and I shall not pursue it further at this time. My attention has been called to it only very lately, but I shall endeavor to procure full information, facts and figures, respecting it, if possible, and make a special report upon it at some future day.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, July 27, 1883.

TRADE AND INDUSTRIES OF BIRMINGHAM.

REPORT BY CONSUL KING.

EXPECTATIONS OF A LOW AMERICAN TARIFF.

Trade in this district has been dull since I last reported, yet perhaps business is better than it has been, since nearly all firms are doing something and most of the factories are at work.

This shows that the amount of trade done has been larger than it was for several years, but the profits have been small and no one seems to anticipate an early improvement.

The most sanguine people whom I hear talk are those who believe that so large a reduction in the American tariff is sure to come in the immediate future as to allow English manufacturers to raise their prices while largely increasing the amount of their sales.

It is a significant fact that almost every man whom I meet here seems to expect that very much better prices in England would be an immediate result of the reduction which they hope for in the American tariff.

THE GUN TRADE OF BIRMINGHAM.

The gun trade with the United States has been languishing. Many orders have been countermanded or postponed. Most of the makers speak of the business as stagnant, yet seem to regard the future cheerfully. One firm is now making extensive preparations to manufacture shot guns of a first rate quality by machinery on a large scale, and with interchangeable parts. Military rifles have long been made upon this principle, but it is, I think, new in the shot-gun trade, and it is likely to prove to be an important innovation; if it be true, as I have been told, that as good a gun of this kind can be made and sold in the United States for $25 as can now be bought for *double that price.*

I may say here that I have also heard of a new mode of boring rifle barrels from solid bars. A factory for carrying on the business is nearing completeness, and I have been promised that so soon as it is at work I shall be permitted to see the process and have it explained to me.

GOLD AND SILVER WARES.

Although little or no gold or silver ware goes to the United States from this country, Birmingham is the center of a vast trade in those articles. Several of the most famous makers of plate and jewelry have their headquarters here, and it is, perhaps, worthy of remark that the silver trade, which is heavily protected, is almost the only one which is not suffering, more or less, from the general depression.

In my dispatch published in No. 25 of Consular Reports, I attempted to give an account of the Government assay office here, and of the system of hall-marking, that is, of stamping an official mark of genuineness upon all silver or gold ware sold in this country. At that time I spoke of the astonishing increase in the amount of business done at the Birmingham assay office during the year ending June 24, 1882.

The figures for the ensuing year are even more remarkable. The amount of gold wares entered for assay was 71,439 ounces in 1881, 87,742 ounces in 1882, and 92,095 ounces in 1883.

The amount of silver wares entered during the same years was 333,021 ounces in 1881, 515,029 ounces in 1882, and 856,180 ounces in 1883. Perhaps the increase may be more apparent if stated in an other way.

In 1881 the number of separate articles of gold and silver entered for assay was 1,050,072; in 1882 it was 1,824,660, and in 1883 it was 2,649,379. It will not be necessary for me to enter again into particulars mentioned in the dispatch already referred to.

I may say, however, for my present purpose, that all gold or silver ware, whether English or foreign, must pay the Government tax if used in this country. In addition to this tax, which is 1*s.* 6*d.* per ounce on silver and 17*s.* per ounce on gold, all such wares to be offered for sale in Great Britain must bear the official stamp of one of the assay offices.

DISCRIMINATION AGAINST AMERICAN MANUFACTURES.

This rule prevents our own American smiths from sending their goods here for sale, as any piece, no matter how elaborate and costly the workmanship may be, would be ruthlessly beaten up and destroyed, should the assayer find it to be the merest fraction under the standard. Were it not for this double protection, I cannot help but think there would be a large demand in this country for the exquisite productions of our modern silver-smiths, which seem to me to be both artistically and mechanically superior to most European silver wares.

I have been told that many leading American manufacturers of silver ware would not be averse to a reduction or abolition of the duty upon silver ware in the United States, if they could thereby secure free entrance for their goods into this country. Should this be true, it would seem as if an excellent opportunity were here offered for a trial of the new fair trade, or reciprocal theory of tariffs.

If our Government should establish assaying offices at the chief ports of export where all goods for sale in England might be tested and stamped, it would be possible to offer to admit all English plate, bearing official hall marks, free of duty, on condition that all plate bearing the American stamp should be freely admitted to the United King*doms.*

England has already a precedent for this, as she admits guns bearing the Prussian and Belgian marks, whilst none others can be sold here without being tested and stamped at a British proof-house. I believe that a large market could thus be opened here for American precious metal wares.

STRIKE IN THE IRON TRADE.

In the iron trade of this district a widespread strike has been in progress for some weeks, but it seems now as if it could not last much longer as many of the men have given in. There has rarely been a strike where the workmen were so thoroughly and entirely wrong as on this occasion. They appear to have abandoned their old leaders and followed the advice of several demagogic persons who counselled the strike and encouraged violence. Probably 40,000 people are compelled to be idle owing to the action of about five per cent. of their number.

Several riotous encounters took place, numbers of mills were attacked and men compelled by main force to cease working. Altogether only a few heads were broken, and a few hundred pounds worth of damage done; but it is the first time that anything of the kind has occurred in this neighborhood for years.

For some years past the rate of wages in the iron trade here has been regulated by what is called a sliding scale. A committee, composed equally of masters and men, is empowered to examine every three months the books of certain representative firms, selected for the purpose. Taking an average of the selling prices of three months, they decide therefrom the rate of wages for the ensuing quarter. Some well-known and disinterested man—last year it was the mayor of Birmingham—is selected by the committee as umpire. This system has worked pretty well, and prices have gone up and down without creating disturbance hitherto, but when, after two successive reductions, a third was announced for the coming quarter, the men, or many of them, struck, as I have said, though their own members of the board of arbitration and their own secretary assured them that the state of the trade warranted this further reduction.

HAND-MADE NAILS.

The hand-made nail trade of this vicinity has received much public attention recently.

Several of the New York newspapers, as well as some London journals, have sent their correspondents to write about it, and a long newspaper controversy has been going on for months on the subject of the employment of women at such a trade as nail and chain making. I have walked through much of the nail-making district and have seen something of what it is like. Almost every cottage has a small brick forge at one side, where the cottagers make nails or chains. Sometimes hundreds of these are gathered together into small towns, such as Cradley and Lye. Others are scattered singly throughout portions of the counties of Warwick, Stafford, and Worcester, far away from the usual black country surroundings. Once this trade was prosperous, but for many years it has been dying out, as machine-made nails have come more and more universally into use. The trade is vastly overcrowded and the demand is daily decreasing. Under these circumstances, it is no wonder that the people are miserably poor, though they seem to be industrious, cleanly, and not especially improvident. One man, a good workmen, told me that by working very hard and long he could earn 18*d.* a day, but he could only get four days' work each week.

A women could probably earn a shilling a day, four days each week. Children could earn about the same. I saw in one place a mother, daughter, and granddaughter working at the same forge. The three together could hardly earn more than 12*s.* a week, and out of that they would have to pay 2½*s.* per week for rent of house and forge. The man who told me he earned 6*s.* a week lived alone. He paid 2½*s.* for rent, and thus had 3½*s.* for fuel, food, and clothing.

When I asked why the young people did not emigrate instead of going into a trade already overcrowded, he laughed at me and asked how long I thought it would take to save enough from his earnings to pay the expenses of emigrating. This man was eating one day when I saw him, and his dinner consisted of bread and salt and a mug of water. He said that he sometimes had potatoes, and now and then, on Sundays, a bit of bacon. He rarely tasted fresh meat. Some of the people manage to keep a pig, and most of them keep pigeons.

I saw various devices for keeping very young children in the forge, yet out of harm's way, whilst the father and mother were at work. Of course, as soon as children brought up in this way are able to lift a hammer, they begin to learn to make nails, and by the time they attain the age of twelve or thirteen years they are as expert as they ever become. Being thus masters of this trade at an age when they should but begin to learn almost any other, they simply continue to be nail-makers rather than undergo an apprenticeship to some new trade, and so each rising generation crowds into a trade already suffocatingly full.

The women whom I saw seemed to be generally healthy and modest women, and the work of making small nails did not strike me as being at all unwomanly. Indeed, it is neater and less laborious than scrubbing and some other recognized female employments.

The conclusion I came to was that, as a rule, the nail-makers are honest, industrious, frugal, and neat, yet they are slowly starving because their trade has been taken from them by successful rivals. I should think they would be a very proper sort of people for the Government to assist by making it possible for them to emigrate.

THE GLOVE TRADE OF WORCESTER.

Another moribund trade in this district is the glove trade of the city of Worcester. Once very flourishing, like the ribbon trade of Coventry, they were both all but killed by the removal of the duty upon French gloves and ribbons. There were more than a score of glove factories in Worcester where there are now but two or three, and they in a languishing condition.

STRIKING COAL MINERS.

The coal miners of the South Staffordshire district, which is in this neighborhood, are now, and have been for some time, on strike. Ten thousand of them are idle, and this adds to the general depression.

THE POTTERIES.

In the potteries, only an edge of which comes within this consular district, trade is so bad that most men can only get three days' work each week. This state of things is, whether truly or not, I cannot say, blamed upon the recent increase in the duty upon pottery going into the United States.

THE HARVEST.

It is too early in the year to make any statement as to the crops. May and June were fine, but July has been very cold and wet, and no doubt a good deal of damage has been done to hay. Should August be fine, however, I think a good general harvest may be looked for in the midland counties.

WILSON KING,
Consul.

UNITED STATES CONSULATE,
Birmingham, July 20, 1883.

TRADE OF ANTIGUA.

REPORT BY CONSUL JACKSON.

TRADE INCREASE.

In submitting this report I have to say that owing mainly to an increased production of the staple crops of Antigua, viz, sugar and molasses, there was a natural awakening in business circles during the past year as compared with the previous year, and with the lively demand that existed in the United States market for Antigua's staple products with remunerative prices, it could be safely put down as having been one of the "good years" for this island. The increase in trade as compared with the previous year, 1881, is here shown, viz:

Imports at Antigua:	
Year 1882	$862,644 20
Year 1881	729,039 14
Increase	133,605 06
Exports at Antigua:	
Year 1882	1,300,059 14
Year 1881	857,192 62
Increase	442,866 52

IMPORTS.

In the matter of imports at this island the greater supply is obtained from Great Britain, then next in order from the United States. The signs of the times denote that the latter country will pass her rival soon in supplying the wants of trade in this direction. This, perhaps, is due more to the means of frequent steam communication with the United States, the advantages of which I will not dwell upon at this time.

EXPORTS.

In exports the trade balance is in favor of the United States. In the article of sugar the value of export to all countries for the year 1882 amounted to $1,047,830.90; of this amount a value of $643,957.76 was exported to the United States and $403,873.14 to other countries, showing a balance of $240,084.62 in favor of the trade with the United States as against exports of sugar to all other countries.

TRADE WITH THE UNITED STATES.

The amounts and relative increase in trade between the United States and this port for the year 1882, as compared with 1881, are shown in the following statements, viz:

Imports from the United States:	
Year 1882	$332,616 03
Year 1881	315.290 51
Increase	18,325 52
Exports to the United States:	
Year 1882	743,717 90
Year 1881	524,043 98
Increase	219,673 92

The majority of the imports from the United States consists of provisions. A few years since—with exception of lumber, staves, and shingles—the trade was about confined to provisions alone, but now trade is seeking many articles of United States manufacture, consisting of such articles as furniture, jewelry, drugs, wines, hardware, glassware, carts and cart wheels, carriages, some cotton goods, pumps, fence wire, &c.

NAVIGATION.

The statement herewith shows but little change, comparing the years 1881 and 1882, excepting the increased number of arrivals and departures of sailing vessels, something over 50 sail, with a very small increase in tonnage, denoting an increase in colonial trade with small craft. I have to report a further falling off in arrivals of American vessels. The number in 1881 amounted to 32, while for 1882 the number was reduced to 26.

CHESTER E. JACKSON,
United States Consul.

UNITED STATES CONSULATE,
Antigua, *June* 28, 1883.

BRITISH POTTERY AND OUR TARIFF.

REPORT BY CONSUL LANE, OF TUNSTALL.

Pottery having been excepted from the general principle of the recent tariff revision—so far as reduction of duties is concerned—the effect of that legislation on the trade of this district has been and still continues to be a theme of much anxious speculation, of which very dismal forebodings have been largely characteristic. At the present time the western horizon is somewhat brighter to the Staffordshire vision.

This "hostile" action on the part of Congress (all foreign tariffs seem to be thus regarded in England) was the more dispiriting from the comparative and sometimes singular absence of any apprehension in that regard. Indeed, that the *status quo*, if not an actual reduction, would be the pottery feature of the new tariff, was the prevailing opinion here until a few days before the passage of the act. One journal devoted exclusively to the interests of English pottery and glass industries, as late as February 1, in an article on the condition of the trade, said: "The great change contemplated in the United States tariff on earthenware, glass, and china is likely in some degree favorably to affect the

English market," and added the consolatory "caution" to American manufacturers that the resulting increase of imports into the United States would not "necessarily decrease their own manufactures." This was only a slight exaggeration of the spirit of the English provincial press on the general subject of the tariff, a spirit moreover which found more or less inspiration in metropolitan journals. This tone was doubtless misleading to many who did not carefully examine the situation, and hence much of the disappointment to which I have alluded.

The matter is perhaps outside the legitimate scope of this paper, but I do not think that English industries are really advanced by a too cheerful or dreamy coloring of current events or the stimulant of perpetual prophecy about the speedy adoption of free trade in the United States. But fortunately I am able to chronicle that, in a degree equal to the excess of hopeful expectancy, the first intelligence of the actual revision was unduly alarming.

Not unnaturally, the telegraph brought the news of a material increase in the rates of impost, while the removal of packages and charges from the dutiable valuation was unknown or lost sight of until the arrival of letters and papers from the United States.

When all the details were understood and estimates carefully made, the almost despairing forecasts, for a time so prevalent, and with which I ought to include a goodly measure of temperate malediction concerning the majority of the Forty-seventh Congress and United States tariff laws in general, were very much modified, and I may regard the feeling now as almost hopeful. Indeed, as to very cheap goods, the encouraging statement above quoted may find its actual warrant.

The following figures, furnished me by a prominent manufacturer who sells largely in the United States, I believe will be found as nearly correct as a general estimate can be made: On white granite goods an increase of 3½ per cent.; on decorated earthenware an increase of 5 to 6 per cent. The very cheap goods he thinks can be sold one or two shillings per crate cheaper in the United States than heretofore.

As may well be supposed, American importers are taking all possible advantage of the immediate relief from the duty on packages, &c., and endeavoring to secure full stocks before the compensating increase of duty affects their invoices; and the same, of course, is true as to goods shipped on consignment. Indeed, the manufacturers doing American business will be taxed beyond their capacity until too late for goods to be shipped in time to reach the United States before July 1. Many orders have been placed on condition of their completion at a specified date before that time, and some manufacturers have for the time being abandoned all other markets and are declining all other foreign as well as home orders to give exclusive attention to their customers in the United States. I am not aware that this extraordinary demand has enabled manufacturers to increase prices; inasmuch as a corresponding reduction would certainly have to follow in a few weeks, such an attempt would doubtless be impracticable.

The total value of exports of earthenware and china from the United Kingdom to all countries during the quarter just closed shows an increase over the corresponding quarter of 1882 of £61,939, being for the first quarter of 1882, £475,563; and £557,502 for the first quarter of 1883. Of the last amount considerably more than one-third appears on the returns of this consulate, and when to these returns are added shipments verified at other consulates (returns of which are not now before me), it will be seen that the United States are still taking nearly one-half the British exports of these goods.

In the absence of the requisite data, I cannot make a satisfactory statement as to the total production or consumption in this country of china and earthenware. A statement embracing a series of years of the ratio of increase in production and home consumption combined with the like tables as to exports and imports would form a group of statistics from which the real condition of the industry in this country might be more clearly deduced than my present means of information will allow. The Board of Trade returns are almost the only available resources for the requisite purpose, and they only show the *foreign* trade. This, however, both as to exports and imports, can be given independently, and may not be devoid of interest as holding a possible relation to the protracted dullness which is said to afflict the English home trade in pottery, and also because of the close sympathy which the figures measuring the growth of this trade have with those pertaining to other and more important measures.

The unsatisfactory condition of the home markets is still largely charged to bad harvests, and other alleged causes of agricultural depression which I could not easily define without invading the domain of English political controversy.

That unremunerative farming, whatever its cause, has contributed largely to depress the English market for manufactured goods, there can be no doubt, but it has not, even with the aid of home competition, prevented the importations of such goods from increasing during twenty years—1860 to 1880—at the rate of 300 per cent., while the exports of British manufactures for the same period increased only 65 per cent. Taking earthenware and china as a separate item, the development of foreign trade from 1857 to 1880—the earliest and latest dates for which I have the separate returns in detail—was as follows: Exports in 1857, £1,492,236; 1880, £2,065,518, being an increase of 38 per cent. Imports of same in 1857, £64,360, in 1880, £468,563, being an increase of 628 per cent. Keeping in view the agricultural depression before mentioned, and the disproportionate increase of population, we can hardly believe that the home consumption of these goods has increased in anything like the ratio of the increase in imports; and the figures therefore point strongly to the conclusion that to the extent of something like $2,000,000 per annum the English manufacturers have been supplanted in the English markets by foreign rivals.

I am not aware that this largely increased buying abroad is considered an element of much importance in the depression of the English markets for domestic products, although in the case of china and earthen ware it now equals in value 20 per cent. of British exports, and probably forms at least 25 per cent. of British consumption. Extending the calculation to the future we discover that a continuance of the above ratio of increase in pottery exports and imports respectively for 15 years from the present time, would bring them to a level, and in that case we should have the somewhat singular spectacle of this country, now the greatest producer of pottery in the world, importing as much as it exported.

Without searching for possible events likely to embarrass, in the British market, the foreigner equally with or more than the home producer, I do not see in the ordinary course of trade what is to arrest the growth of these importations short of overtaking the requirements of the country's consumption.

That English competition, in its home or any other field, cannot be further strengthened at the expense of the English working people is quite clear. Whatever may be said about the cost of living in different countries, I see no present hope of its reduction in England, and this seems to preclude a reduction of English wages. Besides, the tendency of the English workmen's social life, within the sphere of that quality, is upward. His recreations and general surroundings are gradually getting better, his observation larger, and his ambition stronger. He will never give his labor and skill for less than he is getting now. The causes of this growth, becoming more and more manifest from year to year, invite one's pen into a varied field where it is not the mission of mine to enter.

I do not see how the production of earthenware in this country is to be materially cheapened.

EDWARD E. LANE,
Consul.

UNITED STATES CONSULATE,
Tunstall, March 31, 1883.

THE COMMERCE OF CHATHAM.

REPORT BY COMMERCIAL AGENT BUFFINGTON.

EXPORTS.

The value of declared exports to the United States from this consular district shows a steady increase for the last three years. For the year ending June 30, 1881, the increase over the preceding year was $147,608.03; the year ending June 30, 1882, the increase was $226,170.26, and for the year ending June 30, 1883, $140,300.61. The principal increase for the last year was in beans ($63,700.56), eggs ($107,248.52), and wheat ($25,267.26), making a total increase in these three articles alone of $196,116.34. The largest decrease was in lumber ($41,266.11), and in malt ($26,217.22).

There are very strong indications that the exports of the year now entered on will be very materially reduced in quantity and value from the year just closed.

IMPORTS.

The total value of dutiable goods imported from the United States, and entered at this port for Canadian consumption for the year ending June 30, 1883, foots up $99,903, classified as follows:

Animals	$748
Baking powders	1,243
Books	2,198
Breadstuffs	444
Carriages and parts of	2,774
Coal	6,657
Cottons	14,956
Earthenware	433
Fruits	4,624
Gutta-percha goods	814
Hats and caps	1,759
Iron and hardware	30,472
Leather	776
Marble	867
Musical instruments	3,732
Oils	975
Paints	467
Paper	1,406
Provisions	6,929
Silk	1,055
Sewing and other machines	1,037
Vegetables	451
Wood furniture	7,085
Miscellaneous	8,001
Total	99,903
Value of free goods imported from the United States for same period	48,654
Total imports	148,557

The total value of goods imported from England for year ending June 30, 1883, entered at this port, was $22,741, of which $20,098 were dutiable and $2,643 free.

HOW TRADE COULD BE INCREASED.

In former reports I have spoken of the superiority of American cotton goods over those manufactured in Canada, and of their growing popularity, but I regret to say that apparently no effort is being made by American manufacturers to increase their trade here.

American kerosene oil is much preferred to the Canadian oil, and with a proper effort on the part of manufacturers I believe the sales here of both cotton goods and kerosene oil could be very largely increased.

H. C. BUFFINGTON.
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Chatham, Canada, August 1, 1883.

TRADE AND INDUSTRIES OF MONTEREY, MEXICO.

REPORT BY CONSUL CAMPBELL.

I beg to transmit herewith a short report on such features and commercial relations of this district as may be of interest.

The city of Monterey, by its geographical position and its many natural advantages, should be the principal manufacturing and commercial city of Northern Mexico. Several far-sighted Americans have already taken the initiative, and their enterprise and energy will undoubtedly pay them handsomely. The Monterey street railway, now in operation, is a fair illustration of what American capital can accomplish. The company was organized in New York last year with a capital paid-up stock of $300,000, and $100,000 twenty-year bonds were issued to build and equip the first 5 miles of road. Only 2⅛ miles from the depot of the Mexican National Railway to the center of the city are now completed, which, for the past four months, have earned on an average of $80 per day, with an expense of $50 per day. This amount is only on passenger traffic, while their concession allows them to carry freights, which latter, when inaugurated, will increase their net profits at least $25 per day. With only this short line completed the company will pay their interest on bonds and also a small dividend on the stock. When 5 to 8 miles more are completed it will be a handsome paying property.

This illustration will also answer for a paper mill, cotton and woolen mills, fiber factory, glass factory, gas and water works, smelting works, and all the smaller manufactories, and for furniture, wagons and buggies, brooms, matches, &c. Most of the raw material is here, and the high Mexican tariff affords ample protection to the manufacturer. A sugar refinery on a large scale would prove a paying investment. Peloncello, the dark Mexican sugar, can be bought for 3 cents per pound, while the refined sugar, most of which is brought overland from the City of Mexico, is sold at 18 cents per pound. This sugar cannot be called refined, for it is only clarified, being of the same color and quality as our New Orleans clarified, which sells in the United States for about 7 or 8 cents. Sugars from the United States, such grades as cut, loaf, and granulated, are sold here at 25 cents per pound.

The mercantile interests are represented by men of nearly all nationalities. The Germans here, as throughout Mexico, control a large trade, and, most of them being engaged in the hardware, drug, and furniture trade, are the heaviest importers. The commission is also controlled by the Germans, they representing large export houses in Europe as well as the United States.

American dry goods are coming more into demand, and, were it not for the high tariff, they would displace at an early day the European fabrics.

The merchants are very favorably disposed to trade with the United States, and, since the completion of the Mexican National Railway to Monterey, they can get their goods much quicker by purchasing in the United States; the insurance rates are not so high, and they do not have so much trouble in remitting money.

I give below the retail prices of a few staple dry goods. A *vora*, Mexican measure, is three inches less than the American yard.

	Cents per vora.
Imperial shirting	18¾ to 50
American prints	16
American prints, solid colors	18¾
Linen lawns	25 to 37½
Percale	18¾ to 37½
French calico (best)	18¾

American hosiery sells well, but first-class English is preferred. Goods are sold at reasonable profits for cash, 5 to 15 per cent. added when sold on credit of one to six months. The principal stores carry immense stocks, supplying the numerous towns and haciendas both in this state and in the state of Coahuila.

Failures are unknown in this country, and that fact alone should be an incentive to our wholesale merchants to command the trade of Mexico. Mexican exchanges have been organized in New Orleans and Saint Louis, possibly in other cities; it is a good idea. Some of the merchants and manufacturers are sending representatives into Mexico to work up trade; that is a still better idea; but the Mexican merchants are not accustomed to buy goods in that way. Let, say five or six of leading merchants and manufacturers in each of the large cities of the United States club together, rent a house in Monterey and other cities of Mexico, ship a full line of samples of their respective wares and merchandise, and have a live, energetic man to represent them on the ground. I will venture to say that more can be accomplished in six months in this way than by "drummers" in six years, even though their employers belong to a Mexican exchange, and helped to draft resolutions expressing their love for Mexico and her people. The Mexican merchant conducts his business precisely upon the same principles as the American, German, or any other business man. He will buy where he can get the best goods and the cheapest rates.

THE HOT SPRINGS OF MONTEREY.

The thermal springs, situated three miles north of Monterey at the foot of the Topo Mountain, have been held in high regard by the Spaniards and Mexicans for ages. So much so, that in former times they were known as the "Ojos sagrados" or "sacred springs." The water is pronounced by physicians to possess the same medical properties as the Hot Springs of Arkansas—the water specially benefiting and curing rheumatism, scrofula, and all cutaneous diseases. A great many Americans have, and still come, to test the virtues claimed for the springs, and all have expressed themselves well satisfied with the result. This property has been leased for a period of years by an American gentleman.

ROBERT C. CAMPBELL,
Consul.

UNITED STATES CONSULATE,
Monterey, Mexico, June 10, 1883.

FARMING IN THE UNITED STATES AND GERMANY.

REPORT BY CONSUL-GENERAL VOGELER, OF FRANKFORT-ON-THE-MAIN, ON THE COMPARATIVE PROFITABLENESS OF FARMING IN THE UNITED STATES AND IN GERMANY.

My attention has recently been directed to the subject, indicated in the heading of this report, by the perusal of a very interesting book, written in the German language by Heinrich Semler, of San Francisco, and published by Hinstorff, in Wismar, Mecklenburg, on: "The true meaning and real causes of the North-American competition in agricultural products." The object of the author evidently is, to show to the German agriculturist why the American farmer has been able to beat him in his own market, and in connection with the elucidation of that subject, to advise the German in what respects he must change his methods and adopt those of the American, in order to successfully compete with the latter. The author is a man of excellent judgment and great powers of observation. He has evidently lived in the United States by far the better part of his life. He has been a practical farmer in the New England States for years, seems then to have settled in the great Northwest, and is now (or rather was at the time of writing, 1881) farming in California. His facts are carefully collected and his conclusions generally unassailable. He is a thorough American in sentiment. He speaks with pride and enthusiasm of the energy, intelligence, thrift, and frugality of the American farmer, but he comes to the conclusion, that in spite of all these elements, which would vouchsafe success in almost every other pursuit, the condition of the American farmer is not an enviable one, nor such as ought to inspire the German farmer with fear of enduring successful competition. Indeed the author finds that the business of farming is by no means so profitable a pursuit in the United States, as the astounding general results attained have caused the people of Europe universally to assume. What with the price of labor artificially increased by a protective tariff, of which *he* derives no benefit, a higher rate of taxation, higher interest, a market constantly oversupplied, he considers the condition of the American farmer not nearly so favorable as that of his German colleague, who of late has become the special object of the paternal care of his Government. The author, therefore, predicts a gradual decline of the competing power of the American agriculturist, and I confess that he arrives at this conclusion by logical deductions from facts, which I find myself unable to controvert. His facts and figures are collected from official and unofficial sources, and he tests them in the crucible of his own abundant experience. His data for Germany I have submitted to the judgment of intelligent German farmers and estate owners. They are not so complete as his American facts, but so far as they go they are reliable.

It is possible, then, that with an excess of production in the United States over consumption, amounting in wheat alone to from 50,000,000 to 200,000,000 of bushels annually, arguing a national prosperity unexampled in the history of the world, the individual farmer may toil without hardly any profit over and above a fair compensation for his own manual labor, while in Germany, which cannot possibly produce enough to feed its own teeming millions, the individual farmer prospers. I confess that I have been forced to this conclusion.

In order to illustrate and, so far as I may, to prove the correctness of this conclusion, I subjoin two tables, showing the cost of the production of an acre of wheat in the United States and in Germany, respectively, as well as the average price obtained for such production in either country. The figures for the American table are taken from Mr. Semler's book, except that, in view of the large wheat crop of 1882, I have assumed 13½ bushels (instead of 13 bushels, Mr. Semler's estimate) to be a fair average crop. The figures for the German table have been carefully collected and submitted to the practical judgment of intelligent farmers in different parts of Germany. Nevertheless, I am well aware that flaws may be picked in both of them, but I am satisfied that they present as fair a view of the subject under discussion as the difficulties surrounding the same will permit.

Cost of cultivating an acre of wheat.

IN THE UNITED STATES:	
Plowing	$1 50
Sowing, harrowing, &c	50
Seed (80 pounds)	1 50
Mowing, binding, shocking, &c	1 75
Thrashing (20 bushels)	1 56
Sacks (9 to 10 cents)	90
Hauling to station	27
Interest on capital, acre $50, at 8 per cent	4 00
Tax, $50, at 2 per cent	1 00
Interest on stock, implements, machinery, &c	36
Repairs and small purchases	50
Insurance, fire, hail	16
Total	14 00

Average yield, 13½ bushels.
Average price, $1.06 per bushel.
Average return per acre, $14.31.

IN GERMANY:	
Plowing, harrowing, and sowing	$3 25
Seed (80 pounds)	2 40
Mowing, binding, stacking, thrashing	2 15
Rent (or interest and tax)	3 85
Insurance (fire, hail)	45
Repairs of buildings, implements, machinery, and new purchases	2 50
Care of stock, loss by use, &c	1 90
Supplies for hands, bedding, &c.	1 00
Total	17 50

Average yield, 17½ bushels.
Average price, $1.30 per bushel.
Average return per acre, $22.75.

I have rated the cost of properly preparing and tilling an acre of wheat land in Germany rather high, yet I think my figures fairly correct, for while, on the one hand, the price of labor in Germany is less than one-half of that in the United States, yet, in order to produce the result stated, which is not above the average yield, the fields must be and are so carefully prepared, and so many hands are employed in feeding and attending to the cattle, in loading, hauling, and spreading the manure, in weeding, hoeing, harrowing, garnering, &c., as to more than compensate this difference. On the other hand, Mr. Semler suggests that he has estimated the cost of labor per acre in America rather low; that perhaps it ought to be increased by about $1. If it be urged that a yield of 13½ bushels is not an average yield of real wheat land in the United States, which sometimes yields 25 and 30 bushels, then I submit that in such cases, the land being worth from $100 to $150 per acre, the item of $4, set down as interest on the capital, must be raised to $8 or $12, as the case may be, and furthermore, that such results are the exception and not the rule, and that the only proper way is to take a general average.

FERDINAND VOGELER,
Consul-General.

FRANKFORT-ON-THE-MAIN,
June 15, 1883.

AMERICAN WHALERS AT ST. HELENA.

REPORT BY CONSUL MACKNIGHT.

DECAY OF TRADE AND INDUSTRIES.

After careful perusal and study of the official instructions concerning the transmission by consuls of commercial reports to the Department of State, I find that there is literally nothing connected with this island except the fleet of American whalers that could supply a subject of any interest or importance to the Department or to the public in general.

The commerce of this island (never very extensive) has dwindled away till it amounts only to the bare necessaries of life, which are mostly imported in small quantities from Great Britain. The population is very poor and non-industrial. The produce of the island, and the meager traffic with the few ships which call here, are controlled by a single firm.

Every enterprise that has been set on foot here has met with signal failure, chiefly on account of the indolence and untrustworthiness of the working classes and the mismanagement of those who have been left in charge. A case in point has just culminated here: The machinery and appliances which were erected here some time since for the manufacture of the superior quality of aloe fiber which grows wild on the island, and which cost upwards of $50,000, were sold at public auction the other day, and brought barely $600. The entire establishment is now torn down and will be sent to Europe or the United States as old iron and metal.

Most of the arable lands of the island, which were formerly very productive, are lying now in idle desolation; splendid properties of fifty years ago are falling into ruin and decay, many of them untenanted and out of demand, while the people are moving away to the Cape and elsewhere as fast as they can get the means to move with. Nothing whatever is now produced here for exportation. No fancy goods, such as baskets, laces, or gewgaws, are made by the poor natives, who are greatly wanting in ingenuity and intelligence. It is even difficult for residents to procure good vegetables and fruit for daily consumption, while fresh beef, mutton, and butter are luxuries which are only attainable once or twice a week.

THE AMERICAN WHALING FLEET.

There is but one vessel engaged in the transport of merchandise between the United States and the island, viz, the schooner Lottie Beard, of New Bedford, Mass., of 300 tons burden. This vessel makes two trips annually, arriving here in March and September laden with supplies for the whaling fleet, which can scarcely be considered as commerce of this island. A few dozen hams, a few cases of petroleum oil, a small quantity of provisions, and notions, make up the sum of imports from the United States to this island, and the demand decreases as the population diminishes and grows poorer. The total value of the cargo brought here by the above-named vessel this fall was only $25,000, which included six months' supplies for seven or eight whaling vessels. The only cargo she took back to New Bedford was the oil caught by the said vessels, which came here to recruit and to transship their oil. This cargo was divided as follows:

Whaler.	Number of barrels.	Approximate value.
Jireh Perry	780 sperm	$22,000
Tropic Bird	172 sperm, 28 whale	5,000
Pioneer	540 sperm	10,000
A. R. Tucker	200 whale	3,500
Mattapoisett	310 whale	5,000
Stafford	650 sperm and whale	10,000
Kathleen	420 whale, 30 sperm	6,360
Total		61,860

The Merlin, with 80 casks sperm, valued at $2,500, and the Petrel, with 400 whale, valued at $5,600, have arrived since the Lottie Beard's departure, and have kept their oil on board. Only the nine whalers above named have called here this fall, but in the spring upwards of thirty are expected. These are the chief source of revenue to the island now-a-days, and public entertainments, church bazars, &c., are postponed till the "American whalers come in," as a class of people that has money to spend is sure to be ashore at that time.

Each whaler has a crew of from 20 to 30 men, most of whom are foreigners, such as Portuguese, negroes, and Kanakas. The masters are all Americans, and usually the first mate, though in some instances the master is the only American on board. Several hundred of these seamen and the natives of this island are shipped on and discharged from the whaling fleet each year at this consulate, while all their disputes are settled, and their invalids cared for in considerable numbers.

The curse of the whaling fleet is desertion, upon which subject I shall send you a special report at some future time.

JAMES A. MACKNIGHT,
United States Consul.

CONSULATE OF THE UNITED STATES,
St. Helena, November 20, 1882.

EXPORTS OF BRITISH GUIANA.

REPORT BY CONSUL FIGYELMESY.

I have the honor to transmit the annexed printed statement, showing the quantity of produce exported from this colony during the years 1881 and 1882, of which 34,350 hogsheads, 762 tierces, 1,675 barrels, 105,875 bags of sugar; 1,140 puncheons, 153 casks, 30 barrels of molasses, and 2 puncheons of rum, went *to the United* States in 1882, value $4,711,449.08.

The following is a complete statement of the exports for 1882:

Articles.	Demerara.	Berbice.	Total.	1881.
Sugar:				
Hogsheads	73, 929	854	74, 783	59, 442
Tierces	15, 665	206	15, 871	8, 666
Barrels	45, 928	87	46, 015	50, 551
Bags	332, 179	42, 025	374, 204	248, 218
Equal to 137,891$\frac{1}{24}$ hogsheads for 1882; 102,565$\frac{11}{24}$ hogsheads for 1881.				
Rum:				
Puncheons	24, 752	1, 047	25, 799	20, 125
Hogsheads	5, 452	....	5, 452	5, 571
Barrels	2, 047	4	2, 051	1, 710
Equal to 29,208$\frac{1}{8}$ puncheons for 1882; 22,480$\frac{3}{8}$ puncheons for 1881.				
Molasses .... casks	17, 105	15	17, 120	15, 028
Timber .... feet	536, 353	72	536, 425	113, 313
Charcoal .... barrels	42, 882	....	42, 882	41, 600
Cocoanuts	529, 474	....	529, 474	899, 794
Shingles	5, 004, 550	....	5, 004, 550	5, 669, 300

P. FIGYELMESY,
Consul.

UNITED STATES CONSULATE,
Demerara, January 1, 1883.

TRADE AND COMMERCE OF PORTUGAL.

*REPORT BY CONSUL-GENERAL FRANCIS, OF LISBON.**

The importations into the kingdom of Portugal for the calendar year 1882 amounted to $39,297,000.

The exportations of Portuguese productions for the same period amounted to $26,726,102; re-exportations, transfers in port, and in transitu, $8,606,321; making a total of $35,332,423; total amount of duties of all classes collected at the custom-houses being $14,864,520.

The classification of the imports for 1882 is as follows:

Live animals	$1, 109, 680
Animal productions	2, 056, 770
Fish	1, 678, 790
Wool and hair	2, 407, 840
Silk, manufactured	876, 760
Silk, not manufactured	96, 820
Cotton, raw and manufactured	4, 132, 760
Farinaceous	8, 203, 633
Colonial productions	3, 655, 425
Wood	1, 144, 882
Linen and manufactures of	826, 130
Vegetable productions	807, 650
Metals	5, 138, 647
Minerals	2, 399, 590
Alcohol	213, 993
Manufactures of glass	328, 942
Paper and its applications	496, 303
Chemical productions	369, 954
Paints, drugs, perfumery	650, 485
Not enumerated	1, 701, 946
Total	39, 297, 000

---

*As a matter of justice to Consul-General Francis, and as a matter of general interest besides, it may be stated that this is the first report received at the Department of State, from any of its representatives, showing the foreign trade of Portugal. In extenuation of the past it should be also stated that it is more difficult to obtain reliable statistics concerning the foreign trade of Portugal than of any other country in Europe. For these reasons, the Secretary, in his letter showing the commerce of the world for 1880 and 1881, had to base his estimates of the general trade of the kingdom on returns supplied by the British consul at Lisbon to his Government.

To Great Britain belongs the largest share of Portuguese import trade, the United States coming next, and France being the third in the scale.

No returns in detail of the trade with the United States have been printed since 1880, but I have been furnished by the director of the custom-houses with a manuscript list of all articles of merchandise entering the Portuguese dominions from the United States, with statement of the values of the same, during the year 1881. This table is arranged in classes, and the aggregate of each class is as follows:

Living animals	$587 82
Animal productions	3,252 28
Fish	9,063 36
Wool and hair	139 32
Cotton, and its manufactures	67,779 72
Linens	70 20
Wood, and its manufactures	313,430 04
Farinaceous	4,973,140 02
Articles of food denominated Colonial	89,097 89
Vegetable productions	25,221 24
Metals	15,656 77
Minerals	331,577 28
Alcoholic	6,280 28
Glass	1,317 60
Paper	854 28
Chemical productions	1,159 92
Chemical products, perfumery	11,219 04
Various manufactures, n. e	37,290 26
Total	5,188,132

The itemized list to which I have referred is inclosed, marked A. This table is known to be incomplete, as considerable merchandise of the manufacture of the United States is brought into Portugal from England and classified as of English production, although bearing the marks and names of American manufacturers.

It will be observed that American pork and beef do not appear in this enumeration. The former article is prohibited from entry into this kingdom; it cannot be stored while awaiting transshipment; it cannot even be transferred from one vessel to another while lying in the harbor. Whatever supplies of this class reach this market arrive through English channels, and are, I am informed, duly certified to as being of English origin. Frequent and forcible representations have been made to the Portuguese Government, as the records of the legation of the United States here testify, on the subject of the prohibition of American pork and lard from entry into the kingdom; but the obnoxious law continues in full force, sustained by an erroneous judgment which the prohibitive action of Germany and France against the wholesome American food had induced, and by the demand of the producers of swine in Portugal.

If sentiment can be accepted as a factor that influences trade, we may here be assured of a favorable condition in that respect toward the United States. An American article is quite sure to be selected by the Portuguese purchaser in preference to the manufacture of any other country, when the difference in price, in quality, or convenience is not too much against us. But to insure demand and consumption of our productions in Portugal, the requirements of the people and the character of the climate must be consulted. Large consignments of prepared wood-work for buildings have been sent here with but indifferent success. The same may be said of many of the ingenious devices in metal intended for use in building or for domestic purposes, and I am assured large invoices of the latter remain in the Lisbon custom-house unclaimed by the consignees as being unfitted to the demand. What is required here is the application of American ingenuity to Portuguese models, and to assure this the personal observation of the American manufacturer is necessary. The study of Portuguese habits and customs in this regard would be a much wiser policy than efforts to change the methods of established customs and industrial enterprise among this people to assimilate with our own. This may be illustrated by mentioning printed cottons for ordinary or popular use. To insure their sale these goods must be of Portuguese patterns; national peculiarities and traditional inheritance in habit and taste, so to speak, cannot be made to yield readily and pliantly even to higher refinement and conspicuous improvement.

The importation of grain from the United States is large and increasing. The duty collected thereon is very heavy, as will be seen from appended memoranda, marked B, of a cargo of wheat and one of corn which paid respectively 35 and 28 cents a bushel. The total amount of grain and other farinaceous substances imported into Portugal during 1880 amounted to $6,580,421, of which there was received from the United States nearly $5,000,000. I have no means of ascertaining what proportion of the same substances imported in 1882, amounting in value to $8,233,633, was of American production. I append hereto table marked C, showing the sources of the supply of farinaceous substances imported into Portugal during 1880, but I regret that it is not in my power to obtain a similar exhibit for 1881 and 1882, except for 1881 from the United States, as has been explained. During 1880 only $56,000 in value of American flour was imported into Portugal, but it is my belief that this article, if properly introduced into this country, would gradually find a market. The grain trade is now in the hands of a few importers, mainly millers, proprietors of large steam-mills, and in some cases bakers as well. A reduction in the present high rate of duty would render Portugal a more valuable customer. From natural causes Portugal must be supplied with breadstuffs to a great extent by importations.

The total exports from Portugal to all other countries during 1880 amounted to $24,801,761, of which but $658,476 was sent to the United States. I incorporate herein a table showing the nature and value of the merchandise thus exported to us, as follows:

Wines	$49,005
Cork wood	502,763
Salt	18,144
Woolen manufactures	4,721
Cotton goods	648
Onions	667
Olive oil	21
Sugar	297
Cocoa	2,513
Coffee	113
Oranges	5,447
Almonds	648
Cooperage	5,236
Gum copal	369
Scrap iron (old rails)	10,476
Articles made of iron	540
Crude metal	1,100
Lead ore	142
Iron ore	9,415
Antimony	4,708

Chlorate mercury	$339
Tartrates	3,993
Straw hats	33,206
Straw braids	1,850
Furniture (cane)	337
Matting	136
Total	658,476

I beg to call the attention of the Department to the misconception in relation to the export trade of Portugal with the United States, which is apparent on page 329 of Commercial Relations of the United States, 1880–1881. Cork wood is not even mentioned therein, while in point of fact it may be said to constitute four-fifths of the total value at all times of our importations from Portugal. For this article we are an important customer, and stand third on the list.

Although I have made repeated efforts through various channels, private and official, I have not been able to procure information on various agricultural subjects which I deem altogether accurate. There are certain difficulties in the way in Portugal as regards accurate or precise statistics. One is that their collection and proper compilation is a work foreign to the habits of the Portuguese; but the great and apparently insurmountable obstacle as regards agricultural returns is to be found in the reticence of the cultivator, who believes all truthful information extracted from him will be employed by the Government as the basis of taxation.

The head of the agricultural division of the department of public works has, however, given me his estimate of the average value of the cereal productions of the kingdom of Portugal, and I incorporate below a translation of the information furnished me:

Indian corn	$20,477,310
Wheat	13,365,000
Rye	6,941,410
Barley	1,406,160
Oats	262,690
Rice	635,040
Total	43,087,610

This estimate, which probably approximates to accuracy, exhibits a production in cereals or farinaceous food amounting in value to $43,087,610 for 1882.

The importations of farinaceous food during the same year were of the value of $8,233,633, thus demonstrating that about 20 per cent. of the consumption of this food in Portugal is drawn from foreign nations. If the duties on foreign-grown grain were removed or greatly diminished, it is believed the importations of cereals would be largely augmented, the area devoted to the production of grain therefore diminished, and that employed in the cultivation of the vine considerably increased, the latter surely destined to be one great source of Portugal's prosperity. The quality of the grain produced here is said to be excellent. The production of rice steadily increases, despite every governmental obstacle thrown in the way of its cultivation. In 1871 its production on lands previously applied to and withdrawn from other culture was prohibited, but without the effect desired, of diminishing the area thus employed. The Government assumes that such is the insalubrious nature of the cultivation of rice in Portugal that for every 16 liters of rice produced one human life is sacrificed. This extraordinary statement is made upon the authority of an official hygienic report made upon the subject to the authorities. Finally, among the measures proposed by the ministry at the last session of the Cortes was the imposition of a tax of $43 on each hectare (2½ acres) devoted to the cultivation of this grain.

The National Agricultural College, with the experimental farm as its adjunct, situated on the Mafia road, 5 miles from Cintra and 20 miles from Lisbon, is a most creditable governmental enterprise, which is working out beneficent results for the kingdom.

The farm, of 170 acres, with most of the buildings now upon it, was leased to the Portuguese Government for its present uses, and at a small rental, by the Marquis of Pombal, twenty-one years ago. The lease has nine years more to run. The college was established and commenced operations in a small way in 1863. From the beginning a full complement of students, sixty in number, have been in attendance, the Government designating ten of these for free tuition and maintenance, and the others paying $8.10 a month each for the service. The course embraces a period of four years, at the expiration of which time the honors of graduation follow successful examination. Five professors, with a president and director in chief, compose the faculty. The latter, Mr. Gualdino Augusto Gagliardini, is admirably equipped by theoretical learning, practical knowledge, and executive ability for the important duties devolving upon him. The course of study includes agricultural chemistry, physics, natural history, botany, and two or three other cognate branches.

All the farm-work is done by the students, under the eye and direction of the professors. The day is equally divided for study and recitation and for labor upon the farm. Thus there is both the theoretical and practical work. Besides the original Pombal place, 100 additional acres in the vicinity have recently been leased, so that the college farm now embraces 270 acres.

The Government expenditure for the maintenance of this college during the twenty years of its existence has been $282,240, including $80,640 spent upon buildings and for the purchase of agricultural implements and machinery. The expenditures last year above the receipts amounted to $23,184.

Modern agricultural implements and labor-saving machinery, mostly of English and French devices or manufacture, are used for the cultivation of the soil, the harvesting and storing of the crops, and the thrashing and winnowing of the cereals. Modern methods and conveniences prevail in every department of farm-work. The analyzation of the soil, the proper application of fertilizing elements to sustain and enrich it, with rotation of crops as scientific observation points out, and thorough and intelligent cultivation, have brought about gratifying results in the increasing harvest yield. The contrast is very striking in the appearance of the growing crops of this college farm—healthy, vigorous, and promising—and those of adjoining farms—thin and stunted—which are cultivated by the use of the ancient Roman plow and other rude processes of past ages. The productions of the college farm embrace wheat, barley, rye, oats, corn, potatoes, grapes, the grass known as lucerne, the latter product for the first time in Portugal on this place, the experiment proving a success likely to inure greatly to the advantage of Southern Portugal, especially as promising a superior and wholesome food supply for horses and cattle where the ordinary grasses are light and inadequate for the purpose. Grapes of several varieties, including the best for wine, are here grown. Vines from the seeds of American grapes and from those of the Rhine, as well as the celebrated

Arento (Italian) vine, are under cultivation. Wine is produced on the place, and of superior quality for home use. Of cereals it is said the production is ten to fifteen fold in wheat, and considerably larger of other grains. This is about twice the average of other farms adjacent that are cultivated by the ancient methods.

The dairy department embraces some 30 cows, consisting of Alderneys, Durhams, Ayrshires, and of Dutch breeds, as beautiful animals as I ever saw, yielding abundantly of richest milk. There are all the best machinery appliances and conveniences for the treatment of the milk and the production of butter, the superior quality of which commands for it an extra price. The oxen are very large, handsome, and strong; and the animals prepared for food are of the best, the beef being of excellent quality. Of horses there are about 50, young and full-grown, mostly of Arabian breed; and they are certainly beautiful specimens of their kind. Much attention is paid to the rearing of horses and the breeding of the best blooded stock. There are imported hogs, among them Berkshires, which make the choicest pork. The poultry department shows that care has been bestowed upon this branch in the selection of the most famous fowls. Bee-culture and the production of honey is another branch that yields a handsome return.

There are suitable and convenient edifices for all departments, including the main building, a large structure devoted to school purposes, and affording apartments for the students. There are workshops for mechanical practice and training, so that all tools and vehicles in farm service may be repaired and reconstructed by those who receive their education at this college.

The director informed me that graduates from this institution find employment at once on finishing their course; that the demand for their services far exceeds the supply; in many instances they divide their time in the superintendence of two or more estates. The applications for admission into the college far exceed its accommodations. All this is indicative of agricultural advancement in this kingdom, and the increasing benefits that must flow from intelligent labor and educated handicraft. The fact is recognized by the Government in the plans formed to establish branch institutions of a similar character in the seven other districts of Portugal. One has already been established and is in successful operation at Oporto. It is intended that the parent college here shall supply the new institutions in starting with live stock and other material that can be spared.

There are great difficulties to be overcome in displacing the old to make room for the new, however great the improvements of the latter, in a country whose peasantry have been bred to ancient ways, and who fear the innovation of new ideas and labor-saving appliances may deprive them of the opportunity to earn their living by work, and so condemn them to a greater poverty than they now endure. But gradually the little leaven of the Cintra institution is leavening the mass. Portugal, notwithstanding some grave mistakes and glaring evils still perpetuated, has made material progress in agricultural and other commendable enterprises during the last two decades—larger progress than had been achieved during the previous hundred years; and now it is believed that in all industrial activities the country is doing more and better than ever before.

As with other statistics of Portuguese industries, it is difficult to obtain precise information in reference to the production of wine in this country. I gather, however, the produce of the vine in 1882 was about

125,000,000 gallons, and of the estimated value of $28,500,000. The total exports in that year amounted to $10,767,148, of which $6,053,637 was from the Douro district, and known in commerce as "port" wine, $806,901 of wine from the island of Maderia, and $3,781,782 classed as "other wines." Notwithstanding the fatal ravages of the phylloxera in the Douro district, the production of wine has greatly augmented in Portugal, large tracts of land hitherto uncultivated in the Algarves, south of Lisbon, being now devoted to the vine, more than compensating, in quantity at least, for the almost total loss of the vine in certain districts of Northern Portugal, where, however, very successful efforts are making to replace it by the tobacco plant. In the island of Madeira, where the phylloxera caused almost equally disastrous results, some successful efforts have been made to renew the cultivation of the vine, but to a large extent the sugar-cane has been substituted, and with compensating returns.

The ordinary light wines of Portugal are abundant and wholesome, and it is to be hoped that the general attention now paid by public men and cultivators of the vine here to the proper preparation of the cheaper wines of Southern Portugal, fitting them for transport beyond the sea, may be successful. The general study of this subject was the ruling motive in organizing the "Royal Agricultural Exposition," intended to be opened in Lisbon early in the ensuing autumn.

Port and Madeira wines still hold their place. The latter, almost run out for a period, is said to be now produced in much larger quantity, and of quality approaching the Madeira of former times. The port is of many grades, the best being esteemed a superior article. There was exported to the United States in 1881 port wine to the value of $113,006. In this connection it should be observed that much of this wine, it is understood, is shipped to London for transshipment to the United States, and does not, therefore, appear in the custom-house records of exports to the United States. And so also it may be remarked that large quantities of the cheaper wines of Portugal are exported to Bordeaux, France, and there prepared or "doctored" to be sent into the United States and other markets of the world as the genuine and best "Bordeaux."

The cattle trade of Portugal is a considerable interest of the country. Oporto is the principal port of shipment, as the supply is mainly from the north. The official returns of 1882 indicate an export trade of live animals amounting in value to $2,944,752. I append, marked D, a classified table, showing the various races which go to make up this sum.

The imports of cattle into Portugal during the same period amounted to $1,139,469. Of this importation the bovine race consisted of 2,781 head; in value, $773,764. These cattle were mostly introduced into Portugal from Spain, on the northern frontier, for the purpose of being transported to the coast for shipment. I think I may safely say that fully three-fourths of the export of live animals from Portugal are to Great Britain.

I am indebted to Senhor Conselheiro Lima, director-general of the division of industry in the department of public works, for valuable information on this subject, including an estimate of the number of cattle existing in the kingdom of Portugal in 1882, with the average value of each class per head, of which copy is inclosed, marked E.

It is said that while the number of cattle has considerably increased in Portugal of late years, the number of sheep has somewhat diminished.

The trade of Portugal with her possessions in Africa and Asia, which embrace an area more than twenty times larger than the Kingdom of Portugal proper, was, in 1880: Importations from Africa, $754,820; exportations to Africa, $1,954,200. Importations from Asia, $51,800; exportations to Asia, $37,500. In 1881 the Portuguese African possessions sent to Portugal 1,714,201 kilograms of coffee, of the value of $401,605, upon which duties to the amount of $101,337 were collected at the custom-houses. The entire importations of coffee in 1881 were 2,091,487 kilograms, of the value of $482,390, paying duties of $148,405. Coffee was imported from Brazil to the amount of 199,566 kilograms; from Germany, 129,318 kilograms; from England, 44,896 kilograms; from other countries nominal quantities, making up with those named the aggregate as given. I refer to the imports of coffee especially to show the leading source of revenue to this kingdom from its large African possessions. The aggregate of coffee importations in 1882 was 2,787,104 kilograms, of the value of $445,286.

Nature has been bountiful to this little kingdom, and when the industry and frugality of its people and the fertility of its soil are made available by an intelligent preparation of its products for foreign use, a new era of prosperity will dawn upon the country.

The progress made by Portugal in general commerce has been slow but assured. To illustrate, I inclose a table, marked F, giving the imports of each year from 1866 to 1880 from the United States, showing a progress from $543,000 to $5,722,272; the total trade of the two countries with each other during 1880, consisting of imports, exports, and re-exports amounted to $6,528,600; a table showing the combined trade, import, export, and re-export, of all nations with Portugal from 1866 to 1880, marked G; a table, marked H, showing the imports from all nations during 1880; a table showing the total trade of Portugal with all foreign countries for the year 1880, combining imports, exports, re-exports, and special and general trade, marked I.

I also append table, marked J, showing the percentage share of each country in its export trade to Portugal, the United States standing second in order on the list; also showing the share of each country in the same manner as regards their imports from Portugal, by which it appears that we participate in that trade to the extent of only 2½ per cent. of the total. These tables clearly indicate the steady progress Portugal is making in trade and commerce; Table G conspicuously illustrating this improvement.

The navigation interests of Lisbon have doubled since 1878. The evidence of this is to be found in the tables inclosed, marked K and L, treating respectively of the general shipping trade of the port, and of the arrival from and departure of vessels for the United States. While the almost total absence of our flag is to be deplored, it is still gratifying to observe that our general commercial relations with Portugal are so favorable and promising, showing a steady and substantial progress during the past decade, and indicating the possibility of much larger achievements hereafter.

JOHN M. FRANCIS,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Lisbon, July 27, 1883.

***Statistical tables accompanying Consul-General Francis's report,* A *to* L.**

- A. Imports from the United States.
- B. Duties collected at Lisbon on two cargoes of grain imported from the United States.
- C. Importations of grain and farinaceous substances, from all countries, into Portugal.
- D. Exports of cattle from Portugal.
- E. Number of cattle in Portugal.
- F. Imports into Portugal from the United States from 1866 to 1880.
- G. Trade of Portugal with all countries from 1866 to 1880.
- H. Imports into Portugal, from all countries, in 1880.
- I. Total trade of Portugal, imports and exports combined, with all countries in 1880.
- J. Percentage of trade of Portugal with each country.
- K. Navigation at Lisbon, 1882.
- L. Navigation between Lisbon and the United States.

A.—*Value and description of merchandise imported into Portugal from the United States during* 1881.

CLASS 1.	
Live animals:	
Horses	$587 52
CLASS 2.	
Animal productions:	
Meat	168 48
Skins	764 64
Dressed skins	83 16
Tallow	1,674 00
Grease	55 08
Butter	471 96
Not enumerated	34 96
CLASS 3.	
Fish	9,063 36
CLASS 4.	
Wool and hair	139 32
CLASS 5.	
Silks. (No importation from the United States.)	
CLASS 6.	
Cotton:	
Raw cotton	35,832 24
Canvas	989 28
Various manufactures	30,958 20
CLASS 7.	
Linen	70 20
CLASS 8.	
Wood:	
Unsawn	627 48
Boards	60,188 40
Planks, thin	2,043 36
Beams	9,354 96
Staves	234,688 32
Masts	1,765 80
Furniture	1,625 40
Miscellaneous articles	3,136 32

CLASS 9.

Farinaceous:

Wheat	$4,355,526 60
Indian corn	506,434 68
Flour	109,682 64
Beans	590 76
Starch	545 40
Farina, &c	....

CLASS 10.

Articles denominated "colonial":

Sugar	224 64
Molasses	1,908 36
Sweetmeats	157 68
Coffee	166 32
Tea	325 08
Tobacco	87,315 84

CLASS 11.

Vegetable productions:

Plants and seeds for cultivation	271 08
Rosin, pitch	8,620 56
Crude turpentine	14,686 92
Tar	236 52
Oils	487 08
Barks	214 92
Rushes	57 24
Not enumerated	646 92

CLASS 12.

Metals:

Gold coin	$248 40
Silver coin	8,307 36
Iron castings	602 64
Iron hoops	241 92
Wire	1,995 84
Nails	73 44
Cast iron, in rough	738 72
Varnished iron	533 52
Varnished iron	348 84
Iron chairs	97 20
Spades	65 88
Forged iron, plain and varnished	662 04
Cutlery	70 20
Mock jewelry	339 12
Copper nails	104 76
Silver-plated articles	948 24
Zinc	77 76
Not enumerated	200 88

CLASS 13.

Minerals:

Whetstones	$221 40
Petroleum	329,923 80
Candles	55 08
Coal	1,345 68
Not enumerated	31 32

CLASS 14.

Liquor:

Brandy	$6,256 44
Not enumerated	24 84

CLASS 15.

Glass and ceramic productions:

Manufactured glass	$1,172 88
Not enumerated	144 72

CLASS 16.

Paper:		
Writing paper	$92	88
Books	635	04
Not enumerated	126	36

CLASS 17.

Chemical products:		
Chlorhydric acid	$259	20
Refined carbonate of soda, dry	141	48
Not enumerated	759	24

CLASS 18.

Miscellaneous products:		
Proprietary medicines	$6,314	76
Perfumery	1,186	92
Dyestuffs	1,117	80
Blacking	196	56
Paints	199	80
Soap	610	20
Matches	1,070	28
Gun cartridges	453	60
Not enumerated	69	12

CLASS 19.

Miscellaneous manufactures:		
Fire-arms	$1,005	48
Agricultural implements	1,112	40
Sewing-machines	3,076	92
Labor-saving machines	5,589	00
Engraved wooden blocks	75	60
Pictures	72	36
Carriages	578	80
Watches	336	96
Clocks	17,457	12
Watch machinery	130	68
Shoes	120	96
Trunks	59	40
Palm-leaf	54	00
Pianos	165	24
Musical instruments	185	76
Boats	1,908	36
Cordage	1,730	16
Canvas	735	48
Slates	611	28
Hardware	223	56
Tools	602	64
Railway material	270	00
Flat-irons	533	52
Not enumerated	654	48
Total	5,888,132	00

B.—*Amount of duties collected at the port of Lisbon on two cargoes of grain shipped from the United States.*

1883, June 9. On cargo per Italian bark Teresina from New York. Weight, 625,979 kilograms; 23,003 bushels wheat; duty, 7,425 milreis, being 35 cents per bushel.

1883, June 25. On cargo per Italian bark New York, from Philadelphia. Weight, 679,802 kilograms; 27,156 bushels Indian corn; duty, 7,041 milreis, being 28 cents per bushel.

C.—*Importations of grain and farinaceous substances into Portugal,* 1880.

Articles.	From—	Value.
Wheat	Germany	$24, 204
	United States	3, 405, 025
	France	1, 838
	Spain	37, 694
	England	117, 223
	Russia	99, 970
Indian corn	Germany	464
	United States	1, 385, 483
	France	354
	Spain	10, 095
	England	26, 679
	Italy	606
	Morocco	37, 539
Rye	Germany	2, 505
	United States	13, 301
	France	26
	Spain	112, 466
	England	11, 692
	Unknown	13
Barley	United States	2, 395
	France	300
	Spain	49, 907
	England	36, 065
	Italy	5, 505
Oats	Spain	659
Wheat flour	Germany	183
	United States	55, 245
	France	3, 900
	England	6, 664
	Unknown	1, 928
Rice, rough	Brazil	10
	African ports	747
Rice, prepared	England	54
Rice, cleaned	Germany	49, 654
	Belgium	568
	Brazil	935
	United States	2
	France	19
	Spain	224
	Holland	27
	England	558, 839
	Italy	16, 281
	African ports	32
Barley for soup	Belgium	759
	United States	2
	France	396
	Holland	5, 047
	England	516
Barley for seed	Germany	23, 525
	United States	160
	England	2, 583
Other substances	From unenumerated sources	470, 118
	Total	6, 480, 521

D.—*Value of live animals exported from Portugal during* 1882.

Bovine	$2, 314, 242
Sheep	178, 765
Goats	42, 927
Swine	201, 114
Horses	72, 117
Mules	109, 635
Not enumerated	25, 952
Total	2, 944, 752

E.—*Table showing the number of live stock in Portugal in* 1882.

Description.	Head.	Average value.
		Per head.
Horses	88,000	$61.13
Mules	50,600	31 25
Asses	137,950	5 40
Bovine	624,658	22 21
Sheep	2,977,454	97
Goats	....	98
Swine	....	7 61

F.—*Imports into Portugal from the United States, by years, from* 1866 *to* 1880.

1866	$543,132
1867	636,120
1868	972,000
1869	1,221,480
1870	1,826,280
1871	1,627,128
1872	1,307,232
1873	1,016,280
1874	1,388,448
1875	2,489,616
1876	3,688,604
1877	2,319,084
1878	2,455,380
1879	6,468,444
1880	5,722,272

G.—*Total foreigntrade of Portugal with all countries, including special and general trade imports, exports, re-exports, from* 1866 *to* 1880.

1866	$54,888,840
1867	53,047,440
1868	48,252,240
1869	48,754,240
1870	54,954,800
1871	61,488,720
1872	69,480,200
1873	72,209,360
1874	62,621,640
1875	74,088,000
1876	70,140,000
1877	67,494,600
1878	65,429,640
1879	71,667,840
1880	76,160,840

H.—*Imports into Portugal from all nations during the year* 1880.

Germany	$2,007,000
Belgium	870,000
Brazil	2,360,000
United States	5,721,000
France	4,471,000
Great Britain	16,450,000
Spain	2,252,000
Holland	296,000
Italy	432,000
Morocco	85,000
Russia	557,000
Sweden and Norway	1,308,000
Other countries	240,000
Portuguese possessions:	
Africa	667,000
Asia	51,000
Total	37,767,000

I.—*Foreign trade of all nations with Portugal during* 1880; *imports and exports combined.*

Germany	$3,231,000
Austria	7,000
Belgium	1,232,000
Brazil	8,752,000
Denmark	120,000
United States	6,381,000
France	6,063,000
Great Britain	28,096,000
Spain	4,172,000
Holland	592,000
Italy	757,000
Morocco	94,000
Russia	366,000
Sweden and Norway	1,452,000
Not enumerated	80,000
Portuguese possessions:	
Africa	1,255,000
Asia	1,792,000
Total	64,432,000

J.—*The relative position of each country in its commercial relations with Portugal in* 1880; *imports and exports.*

Countries.	Imports.	Exports.
	Per cent.	*Per cent.*
England	44	46
United States	15	2½
France	12	6
Brazil	6	24
Spain	6	7
Germany	5¼	4½
Sweden and Norway	3½	1¾
Belgium	2½	1½
African possessions	1¾	3
Russia	1½	2½
Italy	1½	1½
Holland	¾	1

K.—*Shipping entered and leaving the port of Lisbon during the year* 1882.

ARRIVALS.

Where from.	Sailing vessels.		Steamers.	
	No.	Tons.	No.	Tons.
Germany	29	7,751	119	120,625
Brazil	114	33,831	182	289,217
United States	307	131,328	23	31,716
France and colonies	166	27,964	243	217,584
Great Britain	618	123,965	1,178	1,196,178
Spain and colonies	641	44,268	395	299,419
Holland and colonies	20	3,447	20	13,520
Italy	19	4,112	51	40,177
Morocco	46	2,378	2	1,375
Russia	28	6,354	5	5,426
Sweden and Norway	82	24,337	49	17,241
Portuguese colonial possessions:				
Cape Verde	28	5,846	7	8,531
S. Thomé-Principe	2	239	......	....
Angola	12	3,207	23	30,884
Mozambique	1	308	14	18,710
India	......	....	1	1,392
Not enumerated	412	75,939	221	220,986

DEPARTURES.

Destination.	Sailing vessels.		Steamers.	
	No.	Tons.	No.	Tons.
Germany	55	15, 017	165	168, 114
Brazil	146	42, 646	291	[illegible]
United States	217	114, 415	12	15, 166
France and colonies	171	28, 898	211	178, 362
Great Britain and colonies	490	103, 667	1, 339	1, [illegible], 771
Spain and colonies	848	43, 693	282	197, [illegible]
Holland and colonies	56	11, 827	19	14, 210
Italy	33	10, 061	29	30, 773
Morocco	30	2, 693	1	823
Russia	52	16, 388	5	5, 186
Sweden and Norway	175	53, 020	19	7, 062
Portuguese colonial possessions:				
Cape Verde	27	6, 021	9	4, 729
S. Thomé-Principe	2	382	......	....
Angola	13	5, 492	23	32, 067
Mozambique	......	....	13	19, 252
India	......	....	7	2, 765
Not enumerated	464	101, 676	154	138, 150

L.—*Arrivals and departures of vessels from Lisbon from and to the United States during* 1882.

Nationality.	Arrivals.	Departures.
American	2	3
Italian	47	51
Austrian	41	32
Norwegian	9	15
Portuguese	7	10
English	5	8
French	2	6
Danish	1	1
Russian	1	0
Swedish	1	1
Argentine	1	1
Total	117	122

THE NEW FRENCH MEDITERRANEAN PORT OF ST. LOUIS.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

Our merchant marine, shippers and exporters, and, with due deference to their enterprise and intelligence, our chambers of commerce, may not be aware of the advantages (if of the existence) offered by the new and free port of St. Louis, situated at the mouth of the Rhone. St. Louis is in fact the real maritime port of Lyons, and is reached from the city in from fifteen to eighteen hours. Freight is consequently carried at much cheaper rates than by rail.

The creation of this new French port has cost the Government from $3,500,000 to $3,800,000.

The position of the harbor, from a geographical, nautical, and economical stand-point, is superior to that of any other Mediterranean port. It is situated at the mouth of the Rhone, 42° 23′ 25″ of northern latitude and 2° 32′ 5″ longitude east from Paris.

The port of St. Louis is composed of a canal 3,500 meters in length, 64 meters in width, and of 6 meters in depth below the level of the sea; a maritime basin of nearly 14 hectares superfice and of the same depth as the canal, and of a lock 160 meters in length, 22 meters in width, and 7.50 meters in depth below the level of the sea.

This lock is one of the finest hydraulic works in the world, and has been constructed with the double purpose of preventing the deposits of the Rhone in the canal and to establish communication between the maritime basin, of which I shall hereafter speak, and the great river which, in this part of its course, forms a veritable natural interior port of about 600 hectares superfice, where, upon from 12 to 15 kilometers of length, a depth of from 8 to 10 and 12 meters, and perhaps more, may be obtained.

The lock has 7.50 meters of water depth, whereas the canal and maritime basin have at present but 6 meters. I was told, however, that there would be no difficulty in obtaining for the latter an equal depth and at a very small outlay whenever the necessity should arise.

Splendid quays of 50 meters in width and 1,500 meters in length, alongside of which ships of more than 2,000 tons can easily anchor, surround the basin and line the Rhone, the river front having no less than 700 meters of this fine masonry.

A light-house at the entry of the canal illuminates 10 miles of the sea coast, rendering navigation perfectly practicable during the night.

Even as Havre is the port of Paris and the basin of the Seine, so St. Louis, as the chamber of commerce of Lyons have many times officially declared, is the true port of Lyons and the basin of the Rhone.

These two ports form the two heads of the line of the great navigable way which unites the British Channel with the Mediterranean.

Owing to this favored position, the port of St. Louis, independent of other advantages which it possesses, offers a choice to commercial and manufacturing interests for transportation between the water-way and the railroad, as to the one believed most economical, and in this respect St. Louis is superior to any other Mediterranean port.

Equally for their exports as for their imports, an economy of over 50 kilometers is obtained over all neighboring rival ports, and over all other ports of the country.

Finally, St. Louis is the only port of all French ports, without exception, which offers to French commerce the export of freights, this precious element of maritime life, at the lowest price and in illimitable quantity.

I need only cite such products of the soil as the coal of the Loire and the Gard, the cut-stones of Arles, Beaucaire, and Saint-Paul-Trois-Chateaux, the lime and chalk of Theil, the cement of the Ain and the Isère, the castings of the numerous foundries and furnaces of the Rhone basin, the salt of Camarque, &c., to give an idea of the abundance and variety of its resources.

Until the close of 1880, from the absence of regular means of transportation, the port of St. Louis remained unoccupied and unproductive. But in the early months of 1881 the General Navigation Company of the Rhone (*Compagnie Générale de Navigation*), whose seat is at Lyons, resolved to extend their line, which previously stopped at Arles, to the new port, and at once commenced the establishment of their offices and warehouses. The president of the company, Mr. Jean Bonnardel, the worthy heir of his father and distinguished uncle, the eminent founder of the navigation of the Rhone, whose name will rest forever attached to this river, as Fulton's to the Hudson, has thoroughly realized the immense importance of this new harbor, and through his indefatigable efforts the business of the port has already, in less than two years, assumed proportions which places it third in rank among the ports of the Mediterranean and sixteenth among those of France; in advance, consequently, of those of Bayonne, Cherbourg, Nice, Brest, Lorient, Port-Vendres, Fécamp, Toulon, &c.

Some idea of this remarkable progress may be gathered from the following figures: In 1881 the shipping of the port of St. Louis amounted to 1,261 vessels, with a gross tonnage of 313,745, or a net tonnage of 144,758. In 1882 the shipping was 2,317 vessels; gross tonnage, 448,757, or effective 227,596 tons of freight. In a single year, therefore, the increase was, in vessels, 1,156, or more than 83 per cent.; in tonnage, 135,012, or 43 per cent.; and in actual freightage of 82,818 tons, or 57 per cent.; being an increase in the general total of 61 per cent.

From a statement of the register of the port for 1882 (January to December), I find that 915 steamers and ships, with a gross tonnage of 237,639 (net 103,513 tons), and 1,402 ships and small craft of 211,118 gross, and 124,073 net tonnage, formed the commerce and navigation of St. Louis.

Thus far the commerce of Saint Louis has consisted in the export of coal, building-stones, lime and cement, salt, asphalts, floor-tiles, iron and cast-iron manufactures (columns, pipes, and plates), iron and brass castings, glassware, paper and card board, empty casks, &c.

The import commerce has been (and this should be noted by American exporters) in ores and iron, oxides, building-woods, dye-woods, floorings and beams, tan-bark, wheat, oats, corn, beans, seeds, cotton, vegetable hair, wines, bones, pumice-stone, &c.

But both the export and import commerce may be said to be in its infancy. Here is a comparatively cheap way of introducing our manufactures into France. Load a ship with the right cargo at any one of our ports and send it to St. Louis, a free port (unlike that of Marseilles), where the charges are next to nothing, and it will be strange if our enterprising exporters will not receive a handsome return for their initial voyage, and establish therefrom a successful commerce.

The inauguration of the port of St. Louis and its remarkable success in so brief a period has naturally excited the enterprise of the several river navigating companies, and if their efforts at improvement in craft and machinery shall any way correspond with those of the Compagnie Générale, the Rhone will in a few years (with the completion of its engineering improvements) become a hive of commerce such as few rivers in Europe will equal.

Marseilles commences to perceive that instead of injuring, the new port of St. Louis may even more largely favor her interests, in offering advantages superior to any she can extend, but which from her proximity (it is but three hours' steaming from St. Louis to her docks) she may vastly benefit.

In point of fact, the more enterprising merchants of Marseilles are commencing to establish offices and warehouses at St. Louis; large steamships belonging to great transportation companies are visiting the port as well as ships from various parts of the globe, notably those of Norway, Great Britain, America, Spain, Italy, Greece, and the East.

Even the department of the French marine, appreciating the advantages of the unexceptionable situation of St. Louis over all other Mediterranean ports, is constructing a powerful crane capable of elevating 50,000 kilograms, and this work, which will prove of public and private service, is probably only the commencement of those which a few years hence will show.

The railway which will connect the new harbor with Arles, and which will very speedily be built, will complete the net work of the system connecting St. Louis with all French and foreign railways.

The chambers of commerce of Paris, Rouen, Dijon, Elbeuf, Nice, Avignon, St. Étienne, Vienne, &c., have united with that of Lyons to urge on the part of the Government still greater improvements in the navigation of the Rhone. The French Government have already expended very large sums, and under the direction of M. Jacquet, one of the most eminent of engineers, important results have already been obtained and still greater are in course of development.

It is impossible in the limits of this dispatch to go into the subject of these improvements. They are of so important and special character that in view of the advantages they may present for the navigation of many of our own rivers I believe it to be of moment to present a separate and technical report, which I hope to be able to do at an early day.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, July 25, 1883.

MEXICAN EXPORTS.

REPORT BY CONSUL-GENERAL SUTTON, OF MATAMOROS, ON THE EXPORTS FROM MEXICO DURING THE YEAR ENDING JUNE 30, 1882.

Table A shows the exports for the year by different articles.

Table B shows the amount exported from each custom-house, expressing also the value of precious metals and of other national products.

Table C shows the countries to which these articles were exported.

Table D gives a comparative statement for the five years by separate years ending June 30, 1882.

By table A we find that henequen is the most important article of export, not including precious metals, amounting to $2,672,000; coffee is second, $2,414,000; hides and skins third, $1,708,000; and woods fourth, $1,458,000. The total of domestic exports, not including precious metals, for the year were $12,019,526.

Of the precious metals exported during this year coined silver was $11,607,000, and silver bullion $3,540,000.

The total exports of precious metals for the year were $17,063,767, a grand total of exports of $29,083,293.

By table B we find that over $10,500,000 of the $17,000,000 exports of precious metals went out at Vera Cruz, and over $4,000,000 at Mazatlan. Of the $12,000,000 national products, over $4,000,000 were exported at Vera Cruz, while nearly $3,000,000 were exported from Progreso.

Of the total exports from Mexico, nearly $15,000,000 of the $29,000,000 went out at Vera Cruz.

By table C nearly $5,500,000 of the precious metals went to the United States, over $8,500,000 went to England, and $1,500,000 went to France. Of the other national products the United States took over $8,000,000 or more than two-thirds of the whole amount, while Great Britain took only $1,500,000.

Of the total exports of $29,000,000, the United States took $13,760,000, Great Britain $10,284,000, France $2,186,000, Germany $1,256,000, and Spain $1,111,000.

By table D we see that the exports of henequen have steadily increased for the last five years.

Comparing 1878 with 1882, we find that the exports of coffee and skins have about doubled; exports of wood remain almost stationary, vanilla more than doubles, istle almost doubles, tobacco increases from $86,000 to $351,000, live animals increase from $30,000 to $337,000, sugar falls off $11,000 in the five years; the total exports of natural products show a steady and gratifying increase in each year. The exports for the year 1878 were $6,701,000, while for the year 1882 these amounted to $12,019,000, an increase of about $5,300,000.

The exports of precious metals do not show so gratifying an increase from $22,584,000 in 1878; they have gone down to $17,063,000 in 1872, a decrease of over $5,500,000.

The average annual exports for the time above stated are $30,170,537 in Mexican coin. Reducing this to American money by multiplying the Mexican value by 90 cents, and it will give a value in American coin of $27,153,483.

As it is probable that the output of Mexican mines will not increase in the future, unless temporarily, the financial condition of Mexico, therefore, largely depends upon the exports of other national products.

An increase of one or two million dollars per annum in these natural exports will not only balance the diminished exports of silver, but will be a guaranty of a more stable financial condition.

By the table the exports of eagle dollars are seen to have decreased about 2,000,000 per annum, excepting for 1880, during which year there was a slight increase.

It will be curious to note by future statistics if the removal of the tax of 5 per cent. which took effect November last will make any change in the declared exports. It has been known that large quantities of silver were smuggled out, but the amount and destination thereof could only be estimated.

I have analyzed these tables more carefully and at length than I would have otherwise done because of the present financial condition of Mexico. These figures are of interest at the present moment as showing what increase has been made during the past five years in the exports of various national products.

WARNER P. SUTTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Matamoros, May 30, 1883.

TABLE A.—*Exports from Mexico, year ending June* 30, 1882.

		Values.
Henequen:		
Hammocks	$64,631 15	
Ropes	138,662 26	
Raw	2,468,813 31	
Total henequen		$2,672,106 72
Coffee		2,414,538 20
Hides and skins:		
Hides and skins, cured	37,742 70	
Kid skins	669,557 77	
Beef hides	798,307 14	
Deer skins	200,056 63	
Other skins	2,889 91	
Total skins		1,708,554 15

Woods:		
Ordinary	$72 00	
Fine	620,784 90	
Mulberry	132,870 92	
Dye-woods	705,269 64	
Total woods		$1,458,997 46
Vanilla		780,830 47
Istle:		
Hammocks	4 00	
Ropes	1,469 25	
Raw	618,725 99	
Total istle		620,199 24
Tobacco:		
Worked	226,952 46	
Leaf	124,300 70	
Total tobacco		351,253 16
Live animals:		
Donkeys	93 00	
Horses	78,887 00	
Sheep, goats, &c	3,281 00	
Mules	2,549 50	
Cattle	252,745 50	
Other animals	125 00	
Total live animals		337,681 00
Sugar		266,075 60
Indigo		204,798 00
Orchil		115,617 68
Caoutchouc		114,455 92
Pearl shells		71,141 82
Beans		62,536 20
Corn		61,121 69
Honey		60,911 60
Lead		57,953 00
Sarsaparilla		47,972 58
Copper		44,533 50
Fruits, fresh and dried		43,523 19
Brown sugar, low grade		42,467 54
Horse hair		41,832 39
Raiz de zacaton		40,737 32
Pearls		37,500 00
Purgative medicines		34,493 75
Bank notes and currency		27,255 00
Jewels		24,270 00
Molasses		22,723 00
Grains and seeds		22,146 00
Wool		17,395 76
Chewing gum		15,738 31
Equipages		15,652 00
Wheat		14,154 15
Spices		13,109 64
Gypsum		12,198 42
Lime		9,188 25
Antimony, mineral		8,792 00
Marble		7,829 00
Barley		7,084 00
Bones		6,497 00
Vegetables		5,992 12
Corn meal		5,446 66
Objects of natural history		4,855 00
Live plants		4,853 65

Horns		$1,
Chick-pease		4,5
Machinery		4,
Manufactures		4,
Old rags		3,
Mother-of-pearl		3
Saffron		2
Damiana		2
Feathers		2
Paintings		2
Platina		2,
Medicinal drugs		2,
Cacao		2,
Printed books		
Tortoise-shell		1
Burlaps		
Hats		
Photographs		
Precious stones		
Cascarilla bark		
Confectionery		
Wax, clay, and cloth figures		
Bronze		
Furniture		
Pepper		
Palm mats		
Brass		
Zinc		
All other articles		
Total exports not including precious metals		

PRECIOUS METALS.

Silver:		
Coin	$11,607,888 1	
Bullion	3,540,993	
Ores	551,823	
Total silver		
Gold:		
Coin	$558,3	
Bars	483,	
Total gold		
Foreign coined gold		
Foreign coined silver		
Total precious metals		
Total natural products		
Total exports		

ered to constitute the characteristic of that disease. Those organisms were in different phases of full development, from the size of small black points to that of large round cells, grayish or dark, fringed with a brilliant point in the center. Besides these were to be seen masses of transparent granulations set in a gangue of yellow pigment.

We took one gram of the blood, and, with every care that the case required, our able assistant, Sr. Menezes Doria, made an extraneous injection in the great vein of a limb of a rabbit. Fifteen minutes later tetaniform convulsions showed themselves, with back hollowings, and the animal soon succumbed, fulminated, so to say, by the violence of the virus too rapidly and directly introduced into the great circulatory torrent. At first we suspected that some accident had caused the death of the animal, such as air getting into the vein, or some clot, but the operation was executed with the utmost care, and the death in those cases should have been sudden and unaccompanied with the course of symptoms just mentioned.

On making the autopsy we found visceral congestions analogous to those that we had seen in the corpses of yellow-fever patients, and we found in the blood the same cryptococci as existed in the corpse that served for the inoculation.

If the death had been due to the quick action of the cryptococci, and not to an accident, the blood of the rabbit should, when itself inoculated in another animal, cause the death of the latter. To put this beyond doubt, we took a gram of the dead rabbit's blood and injected it hypodermically into a Guinea-pig. Well, the latter died at the end of some hours (in the night of the 14th) and we found an extraordinary quantity of cryptococci in its blood, and saw also the anatomo-pathologic lesions which usually characterize cases of yellow fever in man. The death of the second animal was evidently due to the contagion, and showed that the rabbit whose blood was inoculated contained in itself the transmittory virus, and succumbed to the influence of this virus.

Not content with this, we injected a gram of the Guinea-pig's blood under the skin of another Guinea-pig, and in the space of some hours this one appeared feverish, oppressed with cold ears and paws, trembling, and rejecting blackish dejections. A drop of this animal's blood showed an infinity of cryptococci, and within a little time it also died.

By these experiments we have proved, therefore, contagion and transmission of the disease four successive times. The sick man received it from the medium in which he lived; from him we passed it to the rabbit, and from it to a Guinea-pig, which in turn transmitted to it another Guinea-pig. In all the four cases the blood showed swarms of cryptococci.

In this manner we are able to produce epizootics in the animals in our laboratory, by inoculating many at once with microbiated blood. These facts, therefore, prove beyond doubt that yellow fever is propagated by contagion from individual to individual; that it is primitively a contagious disease, but may become infectious as soon as sufficiently many focuses accumulate. They also prove that the disease does not reside exclusively or especially in any one organ; it resides in the blood, and therefore in all the organs the blood traverses.

Dr. Domingos Freire also considers that they also establish the parasitic nature of yellow fever, and that this parasite is the cryptococcus found in every legitimate case of yellow fever, and termed by him *C. xanthogenicus*.

Dr. Domingos Freire also communicates the discovery by him and isolation of an alkaloid extracted from black vomit, in which it exists in the state of a salt. He says he has reason to believe that it is a product of a secretion or excretion of the microbii, which, however, does not prevent both the alkaloid and the microbius being factors of the morbid state. It is liquid, of an acid, aromatic smell, oily, forms an opalescent emulsion with water, and is soluble in alcohol and ether. It strongly blues red litmus paper, and must contain a good proportion of nitrogen, as it gives out abundant ammoniacal vapors when heated with potash.

He also ascertained by direct experiment, by cultivating cryptococcus in gelatine within a globe, that the color of black vomit is not due to altered blood, but to the cryptococcus, and he was thus enabled to obtain an artificial black vomit. A culture of the earth taken, as reported in our issue of April 1, from the grave of a man deceased a year before of yellow fever, also produced artificial black vomit.

Another experiment was made with the same earth. A Guinea-pig, whose blood examination showed was in a pure state, was shut up in a confined space, in which was placed the earth taken from that grave. In five days the animal was dead, and its blood proved to be literally crammed with the cryptococcus in various stages of evolution; the urine was albuminous, and the brain and intestines were yellow with the peculiar pigment of the cryptococcus.

In view of such facts he asks how it can now be said that the germs of yellow fever disappear with burial of the corpse. On the contrary, the cemeteries are perennial focuses of contamination, above all as regards the epidemic diseases whose parasitical nature is accepted now in science.

Corroboration of part of the above is also afforded by Dr. Araryo Goes's experiments with blood from the liver of a yellow-fever patient, he considering the liver the special seat of the disease. With its culture on a slice of bread he obtained a fungus and succeeded with the latter in communicating yellow fever to various fowls, Guenea-pigs, and a monkey, by inoculation, injections, and introduction into the stomach.

COMMERCE AND PROSPECTS OF SAMANA.

REPORT BY CONSUL BACON.

I have the honor to submit a report showing the importations from and exportations to the United States for the fiscal year ending June 30, 1883. I also submit a statement showing the imports from and exports to Europe, and one giving the navigation at this port. As no system has been adopted by the custom-house for keeping a record of the quantity of provisions and merchandise imported, I am unable to give the statistics of flour, rice, &c., which are the principal articles of importation from the United States, and from this same inadequacy I am led to believe the imports to be 25 per cent. at least more than are stated. Reviewing the trade of this port during the past year, it is gratifying to know there has been a substantial increase in the importation of American goods, due to the fact that they are generally of better quality than the goods from other countries. Although the amount of French goods imported is considerably in advance of those imported of American manufacture, it is mainly due to the greater prices received on exports in Europe. The importations of provisions, such as flour, rice, hams, *pork,* butter, cheese, and mackerel, are wholly from the United States.

I would particularly call the attention of our exporters to the state of this market in the article of white pine lumber. Owing to the small quantity of lumber imported, the demand is far in excess of the supply. The prices average from $50 to $60 per 1,000 feet for an inferior quality, and I have not the slightest doubt of an assorted cargo selling at the least for $40 per 1,000 feet. In connection with this matter I inclose a translation of a decree issued by the Dominican Government, published in the Gaceta Oficial, which will be of importance to shippers.

Believing that a report on the prospects of Samana will be interesting to those commercially related, I submit the following: The greatest enterprise and prospect is the completion of the Samana Railroad, which, when opened to the public, must necessarily increase the commerce of this port and advance shipping interests. The road, when completed, will extend from Las Cavetas to Santiago, in the interior, a distance of 90 miles, thereby opening a rich and fertile country to enterprise and commerce. The large quantities of cocoa and tobacco cultivated in the interior, instead of being transported by mules to Puerto Plata, as is the present custom, will be shipped by rail to this port for Europe. This will eventually increase trade with this port, and as the ample Bay of Samana affords better facilities for harboring vessels than any other one in this republic, it must, as a matter of course, become the principal port. The cocoa and tobacco shipped from Samana are generally carried by French and German steamships to St. Thomas, from whence they are sent, transferred to direct steamers for Europe. It has been a matter of much consideration by me why the American line of steamers touching at this port do not carry such cargoes for Europe via New York, as it would be much to their interest to do so. The recent declaration of San Lorenzo Bay as a free port, and the subsequent negotiations made by a French company for the same, it is believed will give an impetus to immigration and commerce. Not much hopes are expressed for the success of this enterprise until the completion of the Panama Canal, although preparations are being made. The benefit which this port may receive at that period will be derived from the advantages of Mona Passage as the safest for navigation for the northern fleet for Pacific ports south of Panama.

LELAND C. BACON,
Consul.

UNITED STATES CONSULATE,
Samana, August 4, 1883.

Statement showing the imports and exports between Samana and the United States from June 30, 1882, *to June* 30, 1883.

Articles.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
Provisions and petroleum		$28,136 51		
Merchandise		14,378 23		
Sugar	340 hhds		384,322 lbs	$16,314 92
Molasses	171 hhds		14,395 gals	4,106 00
Cocoanuts	776 bags		78,410	1,068 00
Honey	20 bbls		1,060 gals	400 00
Coffee	4 sacks		474 lbs	37 92
Total		42,514 74		21,926 84

Amount of imports over exports, $20,587.90.

Statement showing the imports and exports between Samana and Europe from June 30, 1882, to June 30, 1883.

Articles.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
Merchandise	....	$34, 506 57	....	....
Tobacco	....	....	156,084 lbs	$4, 940 51
Cocoa	....	....	40,529 lbs	2, 044 40
Honey	....	....	500 gals	350 00
Wax	....	....	1,200 lbs	777 25
Hides	....	....	758	1, 134 44
Mahogany	....	....	43,160 feet	4, 700 00
Total	....	34, 506 57	....	13, 946 60

Amount of imports over exports, $20,559.97.

Statement showing the navigation at the port of Samana, June 30, 1882, to June 30, 1883.

ENTERED.

Flag.	From—	Steamers.		Sailing vessel.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American	United States	13	12, 800	5	198	18	12, 998
British	St. Thomas, S. W. I	...	....	18	770	18	770
French	France	1	1, 372	2	293	3	1, 665
German	St. Thomas, S. W. I	6	4, 392	...	....	6	4, 392
Italian	do	...	....	1	213	1	213
Danish	do	...	....	2	122	2	122
Haytien	Hayti	...	....	1	15	1	15
		...	....	...	....	49	20, 175

CLEARED.

Flag.	To—	Steamers.		Sailing vessel.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American	United States	13	12, 800	4	186	17	12, 986
British	St. Thomas, S. W. I	...	....	18	770	18	770
French	France	1	1, 372	2	293	3	1, 665
German	do	6	4, 392	...	....	6	4, 392
Italian	St. Thomas, S. W. I	...	....	1	213	1	213
Danish	do	...	....	2	122	2	122
Haytien	Hayti	...	....	1	15	1	15
		...	....	...	....	48	20, 163

DECREE.

[Translated from the Official Gazette.]

ARTICLE 1. All privileges that were granted to the rustic estates on large or small scale, issued by decree of 16th of November, 1880, and 8th of July, 1882, are extended to the 15th of July, 1888, on which date the period stated to the present decree will be accomplished.

2. The same privileges are granted to all estates for the introduction of materials as is granted to all central engines.

3. The importation of machines is free, with all additional preparations which may

be required, but should the department of foment deem it necessary there will be a commission named for the purpose of giving in to said department any information concerning said estate, and to resolve at the same time the quantity of materials necessary for the use of it, previous to the proofs that must be given that they are to be entirely dedicated to said firms.

4. All materials declared for the use of erecting buildings are declared free from import duties, with exception of 5 per cent. on amount of invoice which said materials are charged to, excluding all materials imported for the use of estates are free from all charges. The materials herein stated are the following: Boards; white and yellow pine planks, scantlings, and all other quality of lumber for the erection of buildings; shingles, tiles, bricks, sheets or bars of iron, steel or copper, zinc or galvanized iron, slate and all other materials for roofing; iron, copper, or zinc nails; oil for machinery; staves, heads, and hoops for casks; boxes and bags for putting up sugar; carts, wheelbarrows, rails, wagons, and lighters dedicated for the use of agricultural and industrial establishments; Portland or other kind of cement; coal, tallow, and grease for machinery; manila rope and fencing wire, and in general all agricultural implements. Zinc is absolutely exempted from all charges whatever.

5. The proceeds of 5 per cent. shall be collected separately from all other fees, and for the purpose of organizing public instruction in the republic, according to a law which will be issued by the legislative power in its first ordinary session. All funds collected during the delay of the issuing of said law by the legislative power for the purpose stated will be dedicated to the establishing of primary schools in all parts of the republic where they have not as yet been established; also for the payment of rent, erection of buildings, and all utensils for the said purpose, and to introduce all advantages towards said public instruction.

6. The full compliance of this present law is charged to and controlled by the secretary of public instructions.

7. The present decree shall be forwarded to the executive power for its constitutional termination.

Given at the city of Santo Domingo, capital of the republic, this 26th day of June, 1883, in the fortieth year of independence and twentieth of the restoration.

President of Congress:

A. DEETJEN.

Secretaries:
S. A. DE MOYA.
E. MOREL.

The present law shall be in force, notified, and published by the department of state, throughout the territory of this republic, for its full compliance.

Given at the city of Santo Domingo, capital of the republic, this 6th day of July, 1883, on the fortieth year of independence and twentieth of the restoration.

The President of the Republic:

ULISES HENREAUX.

CATTLE RAISING IN BRAZIL

REPORT BY CONSUL-GENERAL ANDREWS, OF RIO DE JANEIRO.

Having received inquiries from persons in Missouri, Colorado, and Washington Territory as to inducements for emigrating to Brazil, and particularly in regard to opportunities for stock raising, and believing that the province of Rio Grande do Sul which, from being the most southerly, has the cooler temperature, would be likely to afford more inducements than any other, I referred the matter to Mr. Preller, the vice-consul there, for a report. He has made an instructive reply, which I think will prove interesting to the Department, and I therefore inclose it herewith.

It will be seen that stock-raising lands are held at high rates, and that no inducements exist for emigration from the United States to that province. It is not at all probable that better inducements exist in any other province.

Recently a man from Northwestern Texas passed here with his family on his way to engage in *cattle raising* in the Argentine Republic. He was not quite sure, however, about his prospects there. He said that a cattle raiser in Texas with a small capital, say of $3,000, could not compete with the large proprietors. The small herds are liable to become absorbed in the large ones, and it was expensive and troublesome to get them back.

C. C. ANDREWS,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Rio de Janeiro, July 6, 1883.

CATTLE RAISING IN SOUTHERN BRAZIL.

REPORT PREPARED BY VICE-CONSUL PRELLER, OF RIO GRANDE DO SUL, BY REQUEST OF CONSUL-GENERAL ANDREWS.

Cattle breeding in the province of Rio Grande do Sul (Brazil) is carried on chiefly in the south of the said province, and is almost exclusively in the hands of the natives, who also carry on the same industry to a considerable extent in the adjacent frontier territory of the Banda Oriental (Uruguay).

Foreigners have hitherto taken no part in this branch of industry; in fact, it is very difficult to acquire suitable lands, which are, as a rule, transmitted as heirlooms, and very frequently allotted as marriage portions. The owner of a good piece of herding land (camp) will make any sacrifice to purchase any adjoining lot that may be for sale, rather than let it go into strange hands, and ready cash is commonly scarce with holders of leagues of breeding grounds and hundreds of cattle.

Little acquainted with the luxuries of town life, the estanciero, as the larger cattle-farmer is entitled here, lives almost in primitive simplicity, and with an abundance of meat, erva matté, and mandioca flour, for himself, family, and slaves or peons; a good stock of plate and jewelry in his house, good horses, with rich trappings for himself, and an occasional game of cards with his neighbors, the estanciero leads a lazy and easy life, suitable to the temperament of the genuine Brazilian.

Stock cattle, composed in the main part of cows, yearlings, with a few bulls, sell at from $5 to $6, one with the other; but for butchery consumption, $12.50 to $13 is the current price for good selection.

The best time for investment in "camp" and stock would doubtless be in the spring, say from August to October. The value varies naturally very much, and is proportionate to the quality of the pasture, water supply, and frontage—$10,000 to $30,000 for each braca by 3,000 bracas deep—but uncleared high land in the north of the province can be had for $10,000 and less.

Government has made in some instances concessions of the latter, but not of "camp," suitable for raising cattle, and in fact the acquisition of a grant from Government is extremely difficult and tardy.

As regards means of transport, these are very inferior, though gradually improving, as several bridges have been constructed over the rivers, which, from streamlets easily waded in the summer, become during the winter months, or after heavy rains, most violent torrents, and quite impracticable for the passage of cattle or wagons, causing often a delay of many days. The roads themselves have no claim whatever to the name, and are merely the tracks made by the ox-carts and hoofs of passing cattle driven in to the saladeros for slaughter.

Taxes are paid in the different townships by the purchaser, and as far as I can learn none whatever are levied outside.

It remains to be seen whether the transport of camp cattle can be successfully effected by railway. Should this be accomplished, a great change must result as the cattle will then be brought into the saladeros in fewer hours than days actually necessary; in good condition instead of worn and diminished in number through casualties on the road, caused by drought, insufficient nourishment, and passage of flooded rivers, to say nothing of the tribe of drivers and horses indispensable for the safe driving.

The sale is often made on the raising ground, but not unfrequently the "estanciero" sends in a heard of 300 to 500 head for public sale at Pelotas, the center of the saladeros. The result of the latter expedient is however dubious, and, as a rule, a prompt sale is preferred. The number of cattle in the province is estimated at from 10,000,000 to 12,000,000 head.

Slaughter of cattle in the Pelotas Saladeros amounted to, during the season (safra) now closing, 260,000 head against 275,000 last season.

WM. A. PRELLER,
United States Vice-Consul.

UNITED STATES CONSULATE,
Rio Grande do Sul, July 6, 1883.

LIVE STOCK IN EUROPE.

REPORT BY CONSUL RYDER, OF COPENHAGEN.

I have herewith the honor to hand a report on the present status of live stock in Europe, and of their relative capacities towards satisfying the wants of their own population.

The large increase which has taken place in the human population during the present century, combined with the vastly augmented purchasing powers of the people, have tended to a proportionate increase in the consumption of animal food.

The demands made in the present day for good, nourishing food may in truth be viewed as a sign of the material advancement and prosperity which have taken place, for the better the people are fed, so much the more will be the amount of work obtained, and so much the more favorable will be the average of life, both of which results are of great importance in an economical point of view.

In the United States and Great Britain, where the consumption of animal food is much larger than in other lands, it is a well-known fact that in both these countries far more work is obtained from the laboring classes than from those in any other lands.

Europe is thus at the present day consuming a very much larger amount of animal food than in former times, whilst its own means of supplying its population is being considerably diminished. For although live stock in Europe has in the last twenty years, without doubt, been considerably increased, nevertheless it has been utterly impossible to keep pace with the advance of population and the increasing requirements of the people. It must also be borne in mind that in some of the important European countries, such as Great Britain, Bavaria, and Wurtemburg, there has not only been no increase, but a decided falling off in their live stock in the later years. Thanks, however, to the supplies received by Europe from the United States and from other parts of the globe, the people have not only not been forced to curtail their demands for animal food, but have been able to augment their consumption.

I shall now proceed to investigate the relative positions of European countries and other parts of the world in regard to the live stock. The collective amount of horned cattle throughout Europe is calculated at about 92,000,000 head, of horses about 36,000,000, of sheep about 200,000,000, and of swine about 46,000,000.

Whilst these figures denote a decided advance on those of twenty years back, it must be remembered, as before stated, that the question of the European supply does not rest so much on the amount of their live stock as in the two points previously mentioned of increase in the population and the steadily increasing demand for animal food from all classes of the communities, and the following table may be taken as a fairly approximate position between live stock and the population in Europe in the later years:

Years.	Population.	Per 1,000 inhabitants may be reckoned of—		
		Horned cattle.	Sheep.	Swine.
1857	244,000,000	355	724	156
1869	278,000,000	331	700	152
Later years	294,000,000	310	682	156

As will thus be seen, Europe's relative strength of live stock, with the exception of swine, has fallen off not inconsiderably of later years; that is to say, the population has advanced at more rapid rate than the live stock, and consequently a greater demand has been made for supplies from other parts of the world.

Of the European states, the Scandinavian countries and Servia stand in a prominently favorable position as regards the relative amount of their live stock to their inhabitants, Denmark ranking first on the list with 735 head of horned cattle per 1,000 inhabitants; next Servia, with 609 head; then Norway, with 562 head; and lastly Sweden, with 483 head.

France may be ranked as taking the place of an European average, whilst below an average come Great Britain, Spain, Belgium, Greece, Portugal, and Italy.

Of sheep, Servia has relatively the largest number, namely, 2,200 head for 1,000 inhabitants, and then Greece, with 1,496 head. Spain, Roumania, Great Britain, and Norway rank as above the European average; Denmark about the average, with 777 head, and all the other countries below the average, the lowest in rank being Holland, Switzerland, and Belgium, with 121 head.

Of swine Servia, has relatively also the largest number. namely, 1,062 head, whilst Spain, which follows next, has only 272; then Denmark with 263; Portugal, Austria, Roumania, and Germany being all above the average; France with an average, and the remaining countries below the average; the lowest in rank being Sweden, Holland, Italy, and Norway, with only 56 head.

In next examining the absolute strength of numbers of live stock in the different countries, it will be seen that Russia has the decided superiority, *taking* all classes of animals together. This country, including

Poland and Finland, in the year 1876 possessed 25,000,000 head of horned cattle, 45,000,000 of sheep, 10,000,000 of swine, and 17,000,000 of horses. The increase during the last twenty years has been greatest in sheep, an increase of about 20 per cent., whereas the increase of horned cattle and swine has only been about 4 per cent., and horses remaining stationary.

Next to Russia, Germany has the largest number of horned cattle, namely, 15,000,000 head, of sheep 25,000,000, of swine 7,000,000, and of horses 3,000,000. In Prussia there has been a considerable increase in respect to all classes of animals; in Saxony and Baden it has been stationary, whilst in Bavaria, Wurtemburg, Hesse, and Oldenburg there has been a falling off.

Austria, with Hungary, ranks third on the list so far as horned cattle and swine are concerned, respectively with 12,000,000 and 7,000,000; in the second rank as regards horses, namely, with 3,000,000, but only in the sixth rank as regards sheep, viz, with 20,000,000.

After Austria, France has the next largest number of horned cattle, viz, 11,000,000 head, whilst it only occupies the fourth place for sheep and swine, namely, 24,000,000 and 5,000,000, and 2,000,000 of horses. From 1850-'72 there was a considerable falling off in horned cattle in France, but in the later years there was again a steady improvement, and in the present time an absolute increase over that of 1850.

Great Britain follows next in regard to horned cattle, namely, with 9,000,000 head, but in respect to sheep stands second on the list, with 32,000,000; as fourth with respect to horses, viz, with 2,750,000; but for swine only in the sixth rank, viz, with 4,000,000. Live stock in Great Britain has fallen off very considerably in the latter years, in such manner from 1874 to 1880 with 500,000 head of horned cattle, with 4,000,000 of sheep, and 750,000 swine.

Finally, as regards the sixth and last of great European powers, viz, Italy, ranks last with respect to horned cattle, with 3,500,000 head; horses with 1,000,000, and sheep and swine, respectively, with 9,000,000 and 3,750,000. Horned cattle in this kingdom have likewise fallen off in the latter years, whereas sheep show an increase.

Of the other European states it will only be necessary to make mention of Holland and the Scandinavian countries. In Holland the absolute number of live stock may be given as 1,500,000 head of horned cattle, sheep 1,000,000, swine 500,000, and horses 300,000. The cattle interest in this country is of considerably more importance than the culture of cereals, about 40 per cent. of the land area is devoted to meadow and grass land, and whilst horned cattle and sheep have increased their numbers during the last twenty years, swine on the other hand have fallen off very considerably.

Denmark in the cattle census of 1881, was stated to possess about 347,500 horses, 1,470,000 head of horned cattle, 1,548,600 sheep and lambs, and 527,500 swine. These figures, as compared with the previous census of 1876, show a very considerable increase in horned cattle and swine, while horses show a diminution of 5,000, and sheep of 170,000.

In Norway, where the cattle interest is likewise of more importance than cereal culture, the number of horned cattle is given at about 1,000,000 head, sheep at about 1,700,000, but of swine not more than about 100,000. During the last twenty years there has been an increase in the numbers of horned cattle and sheep, whilst swine on the other hand have fallen off very considerably.

Last of all Sweden appears with 2,000,000 head of horned cattle, 1,500,000 of sheep, 500,000 of horses, and 450,000 swine. The same as in Norway, horned cattle and sheep show an increase of later years, whilst a diminution in the number of swine is to be observed.

Next as regards the countries situated out of Europe, it will be sufficient to make mention of those which play an important part in the international trade of live stock and their products. First, the United States, with its enormous and steadily increasing amount of live stock, which, notwithstanding the large annual increase of population from natural causes, as well as from the great tide of emigration annually pouring into the country, has been fully able to keep pace with its relative position to the population, and which is considerably higher than in Europe, namely, more than twice as much with regard to horned cattle, and for swine from four to five times as much, whereas for sheep there is no great difference.

From Canada there are no later census returns than those of 1871, when the numbers given were 2,700,000 head of horned cattle, about 3,000,000 of sheep, and 1,500,000 of swine. This absolute number of live stock is not very large, but considering the sparse population, the relative strength of its live stock to the number of its inhabitants, will be found to compare as favorably as Denmark in the proportion of its number of horned cattle per 1,000 inhabitants, and considerably more so as regards sheep and swine.

South America has relatively a larger number of animals even than the United States, especially the La Plata States may be noted for their enormous herds. The statistics which can be obtained from these parts, although perhaps not very reliable, place the horned cattle at 19,500,000 head, with 70,000,000 sheep, and about 500,000 of swine, and seeing that the population is small, the relative position borne by live stock to the inhabitants, must not only be very much larger than in Europe, but also as compared with the United States. In the Pampas plains the horned cattle are put down at 30,000,000 head, but it is calculated that these plains could support an infinitely larger number, as a considerable area of land adapted for cattle grazing is not brought into use.

In Algieria the amount of live stock in 1879 was stated as 1,200,000 head of horned cattle and about 9,000,000 of sheep; and this colony also ranks very favorably in its relative position of live stock to the number of inhabitants.

Lastly, as regards Australia. The stock of animals in these colonies has received a very great increase during the last ten years. In the census of 1878, horned cattle are given at 7,400,000 head, as compared with 4,700,000 in 1876; sheep 61,000,000 against 51,000,000; and swine 815,000 against 695,000. The relative amount of live stock to 1,000 inhabitants is very large, being as 2,800 head for horned cattle, 23,400 for sheep, and 310 for swine.

All the above-mentioned countries play an important part in furnishing Europe with the required supplies, and I hope shortly to be able to supplement this dispatch with a report on the parts taken by all countries, in as well as out of Europe, in the international export and import trade of live stock and their products.

HENRY B. RYDER.

UNITED STATES CONSULATE,
Copenhagen, *July* 10, 1883.

LIVE CATTLE IN BAVARIA.

REPORT BY CONSUL HARPER, OF MUNICH.

The results of the general counting of cattle stock in Bavaria on the 10th day of January, 1883, are given in the following tables, to which are added, for the purpose of comparison, the results of the counting on the 10th day of January, 1873:

Districts.	Years.	Horses.	Neat cattle.	Sheep.	Hogs.	Goats.
CITIES AND TOWNS.						
Upper Bavaria	1883	7, 240	7, 060	2, 811	4, 527	517
Do	1873	6, 845	6, 329	4, 065	4, 091	422
Lower Bavaria	1883	2, 055	3, 466	176	2, 449	167
Do	1873	1, 719	3, 028	242	2, 636	144
Upper Palatinate	1883	1, 040	1, 742	86	1, 500	437
Do	1873	1, 016	1, 569	101	1, 755	357
Upper Franconia	1883	1, 758	3, 225	430	1, 023	897
Do	1873	1, 507	3, 457	523	1, 161	643
Middle Franconia	1883	4, 550	5, 983	3, 939	4, 873	1, 993
Do	1873	3, 760	5, 750	4, 874	3, 837	1, 700
Lower Franconia	1883	2, 088	2, 528	1, 648	1, 798	1, 162
Do	1873	1, 351	2, 432	1, 535	1, 591	819
Suabia	1883	4, 788	6, 928	9, 818	3, 385	734
Do	1873	3, 934	6, 733	12, 877	3, 076	567
Total	1883	23, 519	30, 932	18, 908	19, 555	5, 907
Total	1873	20, 632	29, 798	24, 217	18, 147	4, 652
COUNTY DISTRICTS.						
Upper Bavaria	1883	104, 110	608, 314	244, 980	137, 123	11, 787
Do	1873	104, 374	618, 836	290, 394	104, 504	12, 273
Lower Bavaria	1883	81, 086	518, 161	154, 809	191, 194	15, 498
Do	1873	72, 268	509, 783	202, 262	152, 856	17, 400
Palatinate	1883	33, 869	217, 699	37, 469	72, 535	39, 724
Do	1873	34, 064	221, 834	33, 957	56, 922	34, 502
Upper Palatinate	1883	16, 013	344, 509	112, 814	131, 599	15, 955
Do	1873	15, 934	345, 701	129, 618	123, 685	14, 164
Upper Franconia	1883	6, 450	259, 244	78, 027	76, 343	39, 459
Do	1873	6, 201	275, 552	105, 115	68, 910	34, 224
Middle Franconia	1883	25, 284	294, 505	211, 889	189, 879	34, 532
Do	1873	24, 499	291, 847	219, 226	120, 450	31, 115
Lower Franconia	1883	16, 765	289, 913	143, 962	169, 652	48, 550
Do	1873	17, 441	294, 575	150, 588	145, 296	37, 981
Suabia	1883	54, 992	461, 649	175, 336	103, 453	8, 172
Do	1873	55, 454	478, 325	186, 813	81, 328	7, 520
Total	1883	338, 569	2, 993, 994	1, 159, 286	1, 071, 778	213, 677
Total	1873	330, 235	3, 036, 453	1, 317, 973	853, 951	189, 229
TOTAL.						
Upper Bavaria	1883	111, 350	615, 374	247, 791	141, 650	12, 304
Do	1873	111, 219	625, 665	294, 459	108, 595	12, 695
Lower Bavaria	1883	83, 141	521, 627	154, 985	193, 643	15, 665
Do	1873	73, 987	512, 811	202, 504	155, 492	17, 544
Palatinate	1883	33, 869	217, 690	37, 469	72, 535	39, 724
Do	1873	34, 064	221, 834	33, 957	56, 922	34, 502
Upper Palatinate	1883	17, 053	346, 251	112, 900	133, 099	16, 392
Do	1873	16, 950	347, 270	129, 719	125, 440	14, 521
Upper Franconia	1883	8, 208	262, 469	78, 457	77, 366	40, 356
Do	1873	7, 708	279, 009	105, 638	70, 071	34, 867
Middle Franconia	1883	29, 834	300, 488	215, 828	194, 752	36, 525
Do	1873	28, 259	297, 597	224, 100	124, 287	32, 855
Lower Franconia	1883	18, 853	292, 441	145, 610	171, 450	49, 712
Do	1873	19, 292	297, 007	152, 123	146, 887	38, 800
Suabia	1883	59, 780	468, 577	185, 154	106, 838	8, 906
Do	1873	59, 388	485, 058	199, 690	84, 404	8, 087
Total	1883	362, 088	3, 024, 926	1, 178, 194	1, 091, 333	219, 584
Total	1873	350, 867	3, 066, 251	1, 342, 190	872, 098	193, 881

A glance at this table shows that the number of neat cattle decreased somewhat; the number of sheep considerably; the number of horses has increased a trifle; the number of goats has also increased, and the increase in the number of hogs is an important one.

The following table shows the relative comparison of the extent and character of the change in numbers of stock and the per cental increase and decrease in 1883 as against 1873:

Districts.	Horses.	Neat cattle.	Sheep.	Hogs.	Goats.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Upper Bavaria	+ 0.1	−1.6	−15	+30	− 3
Lower Bavaria	+12.4	+1.7	−23	+25	−11
Palatinate	− 0.6	−1.9	+10	+27	+15
Upper Palatinate	+ 0.6	−0.3	−13	+ 6	+13
Upper Franconia	+ 6.5	−5.9	−25	+14	+16
Middle Franconia	+ 5.6	+1.0	− 4	+57	+11
Lower Franconia	− 2.3	−1.5	− 4	+17	+28
Suabia	+ 0.5	−3.4	− 7	+27	+16
Kingdom	+ 3.2	−1.3	−12	+25	+13

This comparison shows that horses decreased only in Lower Franconia 2.3 per cent., and in Palatinate ½ per cent.; whereas the number increased in the districts of Upper Bavaria, Upper Palatinate, and Suabia from one-tenth to one-half per cent., and in Middle Franconia and Upper Franconia 5.5 to 6.5 per cent. The increase in the whole kingdom amounted to 3 per cent.

The number of neat cattle increased in Lower Bavaria 1.7 per cent., and in Middle Franconia 1 per cent., whereas there was a moderate decrease in the other districts, amounting in Suabia to over 3 per cent., and in Upper Franconia to nearly 6 per cent. In the whole kingdom the decrease was a little over 1 per cent.

Sheep have decreased everywhere except in Palatinate, where the increase was 10 per cent. The decrease in Upper Franconia and Lower Bavaria was 25 per cent., in Upper Bavaria 15 per cent., in Upper Palatinate 13 per cent., and the other districts from 4 per cent. to 7 per cent. In the whole kingdom the decrease reached 12 per cent.

The increase in the number of hogs is large in all the districts, amounting in Middle Franconia to 57 per cent., in Upper Bavaria, Palatinate, Suabia, and Lower Bavaria 25 per cent. to 30 per cent., in Upper Franconia and Lower Franconia 14 to 17 per cent., Upper Palatinate 6 per cent. In the whole kingdom the increase was 25 per cent.

The number of goats was augmented in all the districts except Upper Bavaria and Lower Bavaria, where the decrease was 3 per cent. and 11 per cent. The increase in Lower Franconia was 28 per cent., and in the other districts from 10 per cent. to 16 per cent. The increase for the whole kingdom amounted to 13 per cent.

The decrease in neat cattle has been more than compensated by the improvement of stock in breed, size, and value, and the farmers prefer to keep fewer and better stock.

The decrease in sheep is partly owing to the low price of wool, the changing of pasture into arable land and similar causes.

The rapid increase in hogs is due to the large consumption and high prices.

The increase in goats may be attributed to the fact that marriage and the establishment of a household is now more easy, and the working people keep one or more goats for milk, as it is not necessary for them to possess land for their nourishment.

Population of the kingdom of Bavaria is about 5,000,000.

JOSEPH W. HARPER,
Consul.

UNITED STATES CONSULATE,
Munich, Bavaria, May 12, 1883.

GRAIN COMMERCE OF ROUMANIA.

REPORT BY CONSUL-GENERAL SCHUYLER, OF BUCHAREST.

Referring to my dispatch dated September 13, 1882, I have the honor to send you, inclosed, a supplemental report on the commerce of grain, &c., in Roumania.

Official statistics just published show the commerce of grain in Roumania for the year 1881.

The following tables will show the quantities and values of wheat, rye, and maize exported from Roumania in 1881, and the countries to which exported:

WHEAT EXPORTED IN 1881.

Country.	Quantity.	Value.	Duty received.
	Bushels.		
1. Austria-Hungary	3,277,603	$3,185,830	$35,391
2. Belgium	112,785	107,627	1,218
3. Bulgaria	19,764	19,210	213
4. England	1,454,068	1,413,354	15,695
5. France	1,011,898	983,565	10,930
6. Germany	66,830	64,959	722
7. Greece	249,784	242,790	2,699
8. Holland	83,452	81,115	901
9. Italy	281,460	273,519	3,040
10. Russia	761	740	8
11. Servia	20	20	....
12. Switzerland	3,333	3,240	36
13. Turkey	956,985	930,189	10,350
Total	7,518,843	7,308,218	81,203

RYE EXPORTED IN 1881.

1. Austria-Hungary	182,557	$113,915	$950
2. Bulgaria	96	60	....
3. England	820,941	512,267	4,269
4. France	20,656	12,880	107
5. Germany	91,620	57,170	476
6. Greece	4,668	2,913	24
7. Holland	128,005	79,875	665
8. Norway	3,166	1,976	16
9. Russia	477	297	2
10. Turkey	135	84	....
Total	1,252,321	781,446	6,505

MAIZE EXPORTED IN 1881.

1. Austria-Hnngaay	9,070,453	$4,898,045	$48,987
2. Bulgaria	9,763	5,272	52
3. England	18,530,490	10,006,465	100,069
4. France	1,803,635	973,963	9,740
5. Germany	152,003	82,082	821
6. Greece	287,794	155,409	1,554
7. Holland	63,887	34,499	345
8. Italy	1,063,909	574,511	5,746
9. Russia	145,189	78,402	784
10. Servia	17,200	9,288	93
11. Switzland	2,317	1,251	12
12. Turkey	125,929	68,002	680
Total	31,272,569	16,887,189	168,883

The following tables show the quantities and values of wheat, rye, and maize imported into Roumania during 1881, and the countries from which imported:

WHEAT IMPORTED IN 1881.

Country.	Quantity.	Value.	Duty.
	Bushels.		
1. Austria-Hungary	3, 122	$3, 034	Free.
2. Bulgaria	5, 152	5, 008	Free.
3. England	22	22	Free.
4. France	375	364	Free.
5. Greece	10	10	Free.
6. Italy	370	360	Free.
7. Russia	19, 653	19, 103	Free.
8. Servia	1, 628	1, 583	Free.
9. Turkey	502	488	Free.
Total	30, 834	29, 972	

RYE IMPORTED IN 1881.

1. Austria-Hungary	999	$624	Free.
2. Bulgaria	1, 529	954	Free.
3. Russia	5, 438	3, 393	Free.
Total	7, 966	4, 971	

MAIZE IMPORTED IN 1881.

1. Austria-Hungary	5, 143	$2, 777	Free.
2. Bulgaria	26	14	Free.
3. Germany	8	4	Free.
4. Russia	19, 966	10, 781	Free.
5. Servia	14	7	Free.
Total	25, 157	13, 583	

The following tables show the exportation and importation of wheat, rye, and maize flour during 1881:

WHEAT FLOUR EXPORTED IN 1881.

Country.	Pounds.	Value.	Duty.
1. Austria-Hungary	69, 619	$1, 898	Free.
2. Bulgaria	476, 944	13, 006	Free.
3. England	33, 000	900	Free.
4. Greece	8, 346	228	Free.
5. Russia	197, 285	5, 380	Free.
6. Servia	10, 106	276	Free.
7. Turkey	7, 628, 295	208, 044	Free.
Total	8, 423, 595	229, 732	

WHEAT FLOUR IMPORTED IN 1881.

1. Austria-Hungary	12, 898, 882	$469, 087	Free.
2. Bulgaria	1, 266, 938	46, 071	Free.
3. England	22, 759	828	Free.
4. France	22	1	Free.
5. Italy	440	16	Free.
6. Russia	2, 245, 775	81, 665	Free.
7. Servia	5, 504	200	Free.
8. Turkey	269, 720	9, 808	Free.
Total	16, 711, 040	607, 676	

RYE FLOUR IMPORTED IN 1881.

Country.	Pounds.	Value.	Duty.
1. Austria-Hungary	20, 719	$320	Free.
2. Russia	1, 218	19	Free.
Total	21, 937	339	

RYE FLOUR EXPORTED IN 1881.

1. Austria-Hungary	440	7	Free.

MAIZE FLOUR IMPORTED IN 1881.

Country.	Pounds.	Value.	Duty.
1. Austria-Hungary	59, 485	$811	Free.
2. Bulgaria	31, 812	434	Free.
3. Russia	7, 667	104	Free.
4. Turkey	7, 040	96	Free.
Total	106, 004	1, 445	

MAIZE FLOUR EXPORTED IN 1881.

1. Austria-Hungary	817, 592	$11, 149	Free.
2. Bulgaria	15, 221	208	Free.
3. France	6	....	Free.
4. Russia	18, 898	258	Free.
5. Turkey	1, 100	15	Free.
Total	852, 817	11, 630	

I may add that other cereals were exported from Roumania during 1879, 1880, and 1881 as follows:

	1879.	1880.	1881.
	Bushels.	*Bushels.*	*Bushels.*
Barley	6, 892, 250	9, 874, 409	10, 151, 379
Oats	363, 292	1, 182, 501	971, 585
Millet	512, 884	936, 501	1, 190, 568
Buckwheat	3, 112	22, 926	29, 326

I did not include them in my report, as no questions were asked concerning them.

EUGENE SCHUYLER,
Consul-General.

LEGATION OF THE UNITED STATES IN ROUMANIA,
Athens, February 28, 1883.

GRAIN-PRODUCING AND GRAIN-CONSUMING COUNTRIES.

REPORT BY CONSUL RYDER, OF COPENHAGEN.

I have herewith the honor to hand a report on the requirements of grain supplies for Europe at the present day, and the quarters from which these supplies are drawn.

The great development and progress which have taken place in all branches and in every direction during the present century is not the least to be noted in point of importance as having affected the interests involved in this subject. It is not necessary for us to go back many years to recall a period swhen adverse weather and failure of crops were the cause of death and famine in an extended circle, while other lands were at the same time blessed with a superabundance of means of support; whereas in these days, thanks to the great facilities of intercourse which have taken place even between the most remote countries, we have been able to overcome these adverse strokes of nature. If a failure occurs in one spot, this is speedily made good by supplies from another. Of this we have a striking example in the year of 1879, probably one of the most disastrous harvest seasons ever experienced throughout Europe, but which was at once helped by the stupendous supplies poured in from the United States and other remote lands, which were thus the means of averting what in former times might have been a famine in Europe.

No branch of international trade in this country has met with so great development as the grain trade. While in the first half of the present century this branch was not estimated at more than 4,000,000 of quarters, it is now calculated to have reached the enormous extent of near 200,000,000, and when to this is added the extensive trade in live and slaughtered cattle, butter, cheese, &c., one is almost staggered when reflecting on the magnitude of the means of transport which must be brought into play to accomplish this object; and thus the United States, Canada, and the far distant regions of Australia, India, &c., have been enabled to bring their richly increasing supplies of all products in the world's markets.

I will now proceed to show what part the different countries play in the large and important international grain trade. By dividing these countries under the categories of grain-exporting and grain-importing places, and putting them in their order according to the relative extent of their supplies for export, or again for the magnitude of their requirements, we shall have the two following lists: First as grain-exporting lands—the United States, Russia, Austria-Hungary, the Danubian provinces, British East Indies, Denmark, Algiers, Australia, Egypt, Spain, Canada, Chili, and Sweden. As grain-importing lands, Great Britain, France, Germany, Belgium, Switzerland, Holland, Italy, Norway, Portugal, and Greece.

On the list of grain-exporting lands the United States ranks pre-eminently first and foremost. Not so many years have elapsed since Russia occupied this position, and in 1877 these two countries were about on an equal footing, but in the later years the United States has largely surpassed Russia. This great progress and development is due mainly to the immense extent of fertile soil in the Western States being brought under the plow, as well as to the magnificent organization of our railway transport communication—as it is chiefly from the rich virgin soils of the Western States that these millions of quarters of wheat and maize are thrown upon the European markets, and which produce so much anxiety amongst the agricultural interests throughout Europe.

The main part of these exports is directed towards England, next in importance to France, and then Germany, Belgium, Holland, Denmark, &c.

These large supplies from the United States naturally have had great influence upon the European grain markets, and the severe crisis which the farming interests in so many parts of Europe are now passing through is doubtless due to this severe competition. Many writers on this side of the water seem to be of the opinion that the culminating point has now been reached, that the virgin soils of the Western States will shortly be exhausted, and that with a largely increasing population in the States, and with a called for use of artificial manures on the soil, the export surplus will be diminished and the cost of production so much augmented that European farmers will not long have to contend against this formidable competition. These views, in my opinion, will scarcely be realized. There is still in our Western States an enormous area of fertile virgin soil ready to be brought under the plow by the annually increasing emigration, and it is more likely that the culminating point, instead of being now reached, may only be looked for in a very remote future.

Next on the list comes Russia, a country which, as before mentioned, a few years ago stood first on the list, and on the result of whose crops then mainly depended the prices of the European markets; but the constantly increasing competition of the United States, combined with the political disturbances in the Balkan Peninsula and the bad harvests of 1879 and 1880, have conduced in a great measure to lessen the influence of Russian supplies on the world's grain markets.

Agriculture is without doubt the most important branch in Russia. In a large part of the empire, especially in Southern Russia, the soil is very fertile, rye, oats, wheat, and barley being the chief cereals there grown, and although the statistics of Russia are not so complete as might be desired, it may be assumed that the average of their collective crops may be estimated at about 220,000,000 quarters. Owing, however, to the bad harvests of 1879 and 1880, the collective exports of their cereals fell in the following years from 29,000,000 to 17,000,000 quarters. The most important ports of shipment of their wheat exports are in the Black Sea and the Sea of Azoff, whilst for rye and oats, from ports situated on the Baltic. England is the chief market for Russian wheat, and then France and Germany. The rye is chiefly directed towards Germany and Holland.

Austria-Hungary is likewise mainly an agricultural land, and with its fertile soil and not over-dense population, will doubtless for a long time be able to rank amongst the grain-exporting countries. As a rule, considerable quantities are exported to Switzerland, England, Germany, France, and Belgium, and also some to the Brazils. In Austria, the chief cereal grown is oats, and then rye, barley, wheat, and maize, while in Hungary wheat takes the first place, and then maize, rye, oats, and barley.

The statistical returns from the Lower Danube, Turkey, Bosnia, Bulgaria, &c., are so deficient that it is almost impossible to arrive at a correct estimate of the crops and the surplus exports of these countries. The soil of these countries is very fertile, and notwithstanding the backward state of agriculture, is still able to leave large quantities of grain for export. These exports are mainly directed to England, France, and Austria.

Until a few years back, attention in the British East Indian territory was mostly concentrated on the production of rice, other cereals being cultivated to a very slight extent; but since 1871 the cultivation and export of Indian wheat has largely increased. In England, attention is now being strongly directed to the furtherance of all possible means, through an improved transport system, either of canals or of railways, to an increased cultivation of wheat, so that eventually India may be in a position to compete with the United States on the European grain markets, and it is freely asserted by parties who pretend to be fully acquainted with the capabilities of the country that India in a few years will be able to produce from 30,000,000 to 40,000,000 quarters of wheat of a quality equal to that of the United States or of Russia.

It cannot be denied that a considerable increase has taken place in the Indian exports of late years. While in 1871–'72 this only amounted to somewhat over 100,000 quarters, in 1880–'81 it had reached to 1,400,000 quarters, and in 1881–'82 to as much as 4,000,000 quarters—about 85 per cent. thereof being directed to Great Britain, and the remainder to France, Belgium, and Italy.

Next in importance as grain-exporting land comes Denmark; oats being the cereal most grown here; then barley and rye; wheat being only about 5 per cent. of the cultivated area. The chief part of the exports are sent to England, the remainder to Sweden and Norway.

It is only of late years that Algiers has been of any consequence as a grain-exporting land, but a large development may be looked for, if the plans for bringing the waste lands under cultivation now entertained by French capitalists should meet with success. The exports, consisting chiefly of wheat and barley, are for the most part directed to France.

The grain production of Australia does not appear to have made such progress as was expected. Wheat alone is shown to yield a surplus of any consequence for export. These exports go to England, which in 1880 received about 1,000,000 quarters, the largest quantity yet reached.

Egypt, which in remote ages was the most important of agricultural lands, has still her natural resources. The Nile brings now, as it has done for centuries, the required manure to the fields, so that the farmer has simply to sow the seed to have it returned to him by many fold, but the disastrous tax system prevents all development of agriculture, and the export, which is mainly of wheat, scarcely exceeds 500,000 quarters.

Turning next to the list of grain-importing lands, it will be seen that Great Britain stands prominently forward in the first rank at a pace increasing year by year, and due to three causes, namely, the large annual increase of population, that more bread is now consumed by the people than formerly, and lastly, that wheat cultivation, owing to unremunerative prices, is yearly being reduced, the wheat lands being either sown with other cereals, or else turned into pasture land. Even with the most favored harvests, the home crops do not afford more than six months' supply, and the remainder has to be looked for in importation; but still, with these large imports, the price of wheat is less now than when England depended mainly upon her home supplies in former times, and England is probably less exposed at the present day to danger of suffering from dearth than in the days of its home supplies. In England, barley and wheat are chiefly cultivated. In Scotland, oats; whilst in *Ireland*, potatoes are of the chief importance. Wheat is the preponderating cereal imported into England, the average in the years 1875–'80 being 15,000,000 quarters. In this importation the United States is the chief factor, and, with Canada, furnishes more than half of this land's requirements.

In France, although the yield of crops has increased during the last fifty years, still it is only in exceptionally good harvest years that the home supply is sufficient for its own requirements, and during the last three unfavorable seasons a heavy importation has been required. These imports are chiefly obtained from Russia and the United States.

In Germany, where agriculture may be considered as of a high standard, even this country is unable to support its population with breadstuffs from its own supplies. Rye, the main bread-food, was the first cereal to give out, and for the last thirty years has had to be made good by imports, whereas the importation of wheat only first occurred in 1876, from which date there has been a regular wheat import of about 1,000,000 quarters. These supplies were in the first instance entirely obtained from Russia, but now they are likewise received from Hungary.

Belgium, where farming is more ably carried on than in any of the other European countries, is, nevertheless, owing to its very dense population, unable to supply itself from its own crops, and is compelled to have recourse to an importation of 2,500,000 to 3,000,000 quarters.

In Switzerland the home grain production does not suffice for more than half of the wants of the population, the remaining requirements of about 2,000,000 of quarters being imported from Germany, France, and Austria.

Holland, in later years, has also required a supply of about 2,000,000 quarters, coming in large proportion from the United States, but the rye for their distilleries is mostly from Russia and Germany.

Norway, with its high and northern latitude and barren soil, as might be expected, is quite unable to raise sufficient grain for its own wants, and is compelled to import supplies for about 50 per cent. of its inhabitants, and which, on an average of the last ten years, has been of the value of 35,000,000 kroners.

Agriculture in Portugal and Greece is in a very lamentable condition, and the home supplies are naturally far from sufficient for their requirements, so that Portugal is compelled to import largely of wheat, rice, and maize, and Greece of wheat and maize.

The collective amount of imports and exports of the whole world in the trade of cereals in the latter years has reached to the enormous extent of 190,000,000 quarters and of 27,000,000 centners of flour. This collective quantity in the year 1879 was more than double that of 1869. This stupendous international grain trade of later years is in great measure due to the improved means of communication by rail and steamships, and while it has been of immense benefit to mankind at large by reducing the price of one of the great staples of food, it cannot be denied, on the other hand, that it has been the means of bringing the agricultural interests in many countries under a serious crisis, owing to the severe competition to which they have had to submit from all quarters of the globe. A dearth or partial failure of crops is no longer of the same importance as in former days, when even from the very fear of such an event prices were speedily driven up to a great height, whilst now, where supplies may fall short in one or more lands, the want is speedily made good from remote regions, thanks to speedy information by telegraph and by rapid means of communication by railway and steamships.

This great international grain trade will without doubt in the future still meet with greater extension to the benefit of the general masses throughout the world, but, at the same time, one is forced to admit that just as every medal has its reverse side, so the reverse side in this case is the crisis through which many important agricultural interests will have to pass.

Denmark is perhaps one of the countries which has been the least affected by this crisis, but yet if it is intended to maintain its present favored position they should not forget to take such steps as these changing times may call for, whether in the removal of all injurious restrictions on agriculture, the lightening of all land burdens and by the greater development of their transport communications, and perhaps, chief of all, will it rest with the agriculturists themselves in order to maintain this position that they take special care that their products are such that they not only can compete, but excel in quality those of other lands.

HENRY B. RYDER,
Consul.

CONSULATE OF THE UNITED STATES,
Copenhagen, June 23, 1883.

THE HARVEST IN DENMARK.

REPORT BY CONSUL RYDER.

I have herewith the honor to hand a report over the prospects of the approaching harvest in Denmark.

The accounts received from all parts of the country continue to repeat the complaints previously made of the unfavorable state of the weather from the autumn of the past year until the close of the spring in the present one. Frost set in during the early part of November, accompanied by gales of wind and frequent falls of snow, which continued for a long time, with frequent alternate stages of thawing and freezing, so that in many parts the ground was covered with layers of frozen snow; but the most disastrous of all were the severe frosts experienced in the months of March and April, and especially the night frosts, which at intervals were very severe up to the very end of May. The winter and spring have also been unusually dry, so that an insufficient moisture in the soil has greatly retarded the growth and topping of the crops, and these unfavorable conditions for vegetation seem to have been pretty general all over the country.

Rye, especially, has suffered from these unfavorable conditions. Where it has been sown early in good strong soil, it has somewhat better appearance, although far from being good, and, as a general rule, looks thin and weak, and in Jutland very short in the straw, so that even where sown under such favorable circumstances, it is not expected to give a good yield. And all the rye which was sown later in the season or on light soils, such as in Jutland, has a very poor appearance, and from several districts it is reported that a good part has been plowed up. This cereal would appear to be worst in the island of Fyen, and in the north, the midland, and western parts of Jutland.

Wheat has suffered less, although this cereal likewise shows signs of the ill effects of this unfavorable weather. On good, well-drained lands, it has a fair appearance, and from some districts is even reported to be *very promising*. It is mainly to square-head wheat, in those places *where it* could only be got late in the ground, that the severe winter and spring weather has caused most injury, and in some places it has had to be plowed up; but the last reports mention that a great improvement has since taken place in the appearance of this description of wheat, and that its present aspect can now almost compare with that of the other wheat kinds.

Spring seeds which could be got early into the ground were sown under very favorable conditions, and all well drained and good cultivated farms have come well up, and have so far a very promising appearance, notwithstanding the dry season. But on the other hand, it is quite otherwise with the seeds which were sown late, and of this, unfortunately, there would seem to be a large proportion this year, partly arising from the soil not being got in order owing to the unfavorable weather of last autumn, and partly from the spring sowing in many places having been put off in the expectation of rain, so that at last one was compelled to sow in a parched soil. In such places the grain has a very poor appearance, not half of the seed having germinated, and in its place a mass of weeds is to be seen. Should the rain be delayed much longer, the fields of spring grain will, without doubt, give a very poor yield. These cereals are reported most unfavorably in the light soils in the north and northwest of Jutland. In the more fertile districts, namely, the Southern Islands, the prospects are mentioned as more promising. Insects are also reported from several districts to have attacked the crops of pease and tares.

Roots in most districts have also an indifferent appearance. It is only the exception, where they were sown in the latter part of April on good strong soils, that they are looking fairly well, but in most cases the sowing has been protracted to a later period in a dry, unfavorable condition of soil, and as the rain was still delayed, in most of such fields the seed has come up very sparingly and the plants have been to a great extent destroyed by the turnip fly, so that in many instances the fields have had to be plowed over and resown.

Clover fields, especially here and there where the plants had been injured by the frost, have sustained much damage during the winter and early part of spring, but from the reports now to hand it is stated that a considerable improvement has since taken place in the appearance of these fields; nevertheless from the check to its growth during the long drought the yield of this description of hay cannot be expected to be otherwise than small.

Meadow hay has also been similarly affected from the same causes, so that it was very late before it wore a green appearance. The warmth in the latter part of May has, however, tended to produce a similar improvement in the appearance of these fields.

Winter foddering has this year been much more substantial than is generally the case, owing to the large stocks of hay and straw, the increase of root tillage, and also that a great part of the grain of last harvest was only fit to be used as fodder material. When the cattle were turned out to grass, commonly in the latter part of May, they were in much better condition than usual, and notwithstanding the large consumption during the long winter season, there was an ample supply in all parts, and in many places there is a remaining surplus, although perhaps not so large as had been expected.

The dairy yield, partly owing to this nourishing foddering and partly because the cattle were taken to their winter stalls in very good condition, has been more considerable than in ordinary years, and although complaints have been heard from some dairies that more milk than usual was required per pound of butter, so on the other hand the employment of the centrifuge in most dairies has led to an increase in the yield of butter, and although prices met with a decline sooner this year than in the previous ones, nevertheless dairy profits may be said to have ruled very favorably. The chief complaint seems to be of the overproduction of cheese, and the opinion prevails that it would be more desirable to have this manufacture confined to the Union dairies, as also of the necessity of devoting more attention to the production of a better quality of this article. In several reports it is noticed with much satisfaction that a great improvement has taken place in the quality of the butter produced on the small farms, and this is mainly attributed to the circumstance of these small proprietors having emancipated themselves from their former mode of dealing with the country traders, and now sending their butter direct to the Copenhagen market, where they obtain better prices.

Fattening of live stock, to those who disposed of their animals in the early part of the year, has been very remunerative, but in April and May a fall in prices had to be submitted to, and where purchases of lean stock had been made in autumn or especially in mid-winter at the then high rates the profits have been small.

The fear that restrictions might be put on the *swine trade* from this country to Hamburg, which in the month of April was causing so much anxiety to the agricultural community, has fortunately not been realized. but it has been the means of attempts having been made to open out a swine trade with Holland, which, as a competition with Hamburg, would always be of advantage, supposing that the prices and trade conditions were satisfactory, which so far has not yet been demonstrated.

Lambing, on the whole, has been fairly satisfactory, although from some districts it is reported that owing to the severe cold spring it had not fallen out so favorably, and also that a considerable number of sheep had died from the effects of the damp autumn of last year. As the wool manufacturers are becoming less partial to the Dishney wool, other English breeds are being now introduced into the country. From Jutland there would appear to be a greater desire to increase their stock of sheep, as also to defer sending the lambs to the English markets until their second year, as the prices of this description of live stock are not subject to so great fluctuation as that of cattle.

Fruit trees have blossomed everywhere remarkably well, and good crops of all kinds of fruits may be looked for.

The labor market in all districts has been more restricted than in former years. This is mainly due to the large flow of emigration which took place last year from all the Scandinavian countries to the United States, as also to the extra labor called for from the construction of new railways in Jutland and in the island of Fyen. The chief complaint, however, would seem to be the want of good dairy-maids, and the wages for these have in consequence risen very considerably. Day by day this want is the more fully felt, owing to the constant increase of dairies throughout the kingdom. Many dairy-maids have been procured from Sweden, and as a rule they do their work most satisfactorily, and are even preferred to those of the Danish class.

From the foregoing *résumé* of the prospects of the crops, it would appear that the coming harvest in Denmark, even under the most favorable weather during the remainder of the season, can scarcely be expected to come up to an average, and that with further adverse conditions the yield may fall considerably below that of an average.

HENRY B. RYDER,
Consul.

CONSULATE OF THE UNITED STATES,
Copenhagen, July 16, 1883.

GRAIN CROPS OF RUSSIA.

REPORT BY CONSUL VAN RIPER, OF MOSCOW.

The object of this dispatch is to give you the official report of the grain crop of Russia, now growing, as to its condition on the 1st June, instant.

I beg to hand you below a literal translation from the Russian Official Gazette, viz:

The Official Gazette gives a series of informations as to the state of the fields in various governments, gained by telegraphic reports of the 20th May (1st June), which were sent to the minister of the interior in consequence of his inquiries.

In the northern governments, the winter corn in the government Archangel has in several places come formed unsatisfactory under the snow. Many fields have also suffered in the autumn by worm-holes. Owing to the mild weather, and the scarce rain showers, the summer corn and grass are well forward.

Government Wologda.—Winter corn stands satisfactory for the most part. Other spaces, which in the autumn had to suffer by worm-holes, have in the spring been cultivated with summer corn; the latter gives entire satisfaction. State of meadows and fields satisfactory.

Wjätka.—The winter fields have recovered by the rain. The summer corn has been sown towards the end of May. The grass-growing is satisfactory.

Perm.—In consequence of the dry and cold spring, the winter corn is moderate in four districts, but satisfactory in all others. The summer corn is growning well almost everywhere; the grass is satisfactory.

Novgorod.—The winter corn is satisfactory in seven districts; middling in three others, but partly bad in the Waldaia district. Summer corn and grass have hardly come forward yet.

Oloncz.—Winter corn half satisfactory, half moderate, many fields have been plowed up and sowed with (winter) summer corn; the latter has been sowed towards the end of May, but grows well; grass-growing was kept back by the coldness in the districts of Oloncz and Powenez, but in the others it stands satisfactory.

St. Petersburg.—Winter corn is for the greater part satisfactory; only in a few places it is wintered out; grass-growing satisfactory.

Pskow.—With the exception of the district Opotschez, winter corn stands well everywhere; summer fields have been cultivated; meadows have suffered by the coldness, in the beginning, but owing to the warm weather the grass has recovered later on.

In the central, but not those connecting with the Blackearth governments, the winter corn is very satisfactory in the government Wladimir; satisfactory in Smolensk, partly satisfactory in ten districts of Moskau, and eight districts of Kaluga. By worms and cold, the corn has suffered in the governments of Twer, Yaroslaw, and Kostroma. The summer fields have been cultivated until nearly the end of May. Grass-growing was satisfactory everywhere.

The central Blackheath governments.—Winter corn stands perfectly satisfactory in the governments Tula and Kursk, and for the greater part satisfactory in the governments Orel, Rjasan (nine districts), Charkoo, and Tschernigow. They had suffered in Pensa, and Woronesch, but have lately recovered to a great extent. The summer corn stood satisfactory in the governments Tula, Orel, Kursk, Woronesch, Charkou, and Tschernigow, good in Poltava, moderate in Rjasan and Tambow.

Wolga government.—Here the winter corn is for the greater part satisfactory in Nishnii-Novgorod, unsatisfactory in three districts of Kasan, in all others moderate, but in Simbirsk unsatisfactory; part of the fields had to be plowed up. In two districts of the government Saratow (Zarizyn and Balaschew), satisfactory; in the others partly satisfactory, partly bad, but in Balaschew grasshoppers have lately appeared.

Samara.—Winter corn stands bad in five districts, and had to be plowed up in most of the places. Government Orenburg, satisfactory. Governments Ufa and Astrachan, partly satisfactory. Summer corn had not yet gone up everywhere, but stood very satisfactory in Simbirsk, Samara, Orenburg, and good in Astrachan; grass-growing was good in Saratow, bad in Kasan, but in other respects, for the most part, satisfactory.

Southern governments.—Winter corn suffered by strong colds in spring in the government Yekaterinoslav; the fields had for the most part to be plowed up and sowed with summer corn.

In Kherson and Bessarabia winter corn stands good almost everywhere; summer corn and meadows are likewise in a most satisfactory condition.

Southwestern governments.—Both summer and winter corn, likewise grass, for the most part satisfactory; also in the governments Podolsk and Kiew. Owing to the warm weather lately, there are prospects of a satisfactory harvest in Todolien.

Northwestern governments.—Winter corn is only satisfactory in the government of Mohilew, moderate in Minsk; the same had to suffer very much by the cold, and late spring, in the government Grodno, Kowno, Wilna, and Witebsk; nothing positive is to be said yet, as to the state of the summer corn; grass-growing was good only in the government Mohilew.

Baltic governments.—A moderate production of winter corn is expected in Kurland, but no judgment respecting the summer corn and grass-growing can be made yet.

In Livland, the corn-fields and grass stand satisfactory.

In Estland, the winter fields are quite satisfactory; the summer corn has come too late, in consequence of the cold and rain; nothing can be said yet as to the grass-growing.

Weicksel governments.—Winter corn is satisfactory in the governments Sedlez. Radom, and Kalisch, moderate in Lomsha, for the most part satisfactory in Lublin, Kielce, and Suwalki.

In Warsaw, Plozk, and Petrokow, the winter corn has suffered very much by the strong cold; summer corn had not yet ripened by the end of May. Likewise the grass-growing can only be called good in the government Kielce.

The foregoing translation of the official reports has been confirmed to me by merchants in this branch of trade; hence I place reliance on its accuracy.

E. G. VAN RIPER,
United States Consul.

CONSULATE OF THE UNITED STATES,
Moscow, June 20, 1883.

BELGIAN CROPS.

REPORT BY MINISTER FISH, OF BRUSSELS.

I have the honor to inclose herewith a copy (with translation) of a statement published in the Moniteur Belge of this morning, showing the prospects of the crops in Belgium. The reports from the various provinces are dated from June 13 to July 2.

The hay crop has suffered somewhat from drought. The cereals are backward, owing to drought, but recent favorable weather has improved their condition, and, with the exception of rye, their appearance is satisfactory. The rye crop is poor.

In 1882 Belgium consumed 36,269,920 kilograms of foreign rye; with the failure of her own crop this year she will doubtless be compelled to take an increased amount, although in 1881 she exported 21,896,475 kilograms more than she imported.

Beans, pease, and flax indicate a good crop. Colza, on the other hand, will be only a moderate one. Potatoes promise a very abundant crop. The fruit crop will also be good.

With favorable weather the present year will be a good one for the Belgian agriculturists.

NICHOLAS FISH.

UNITED STATES LEGATION,
Brussels, July 10, 1883.

CROP PROSPECTS IN BELGIUM.

We give herewith the prospects of the crops for this year.

Dry weather alternating with rain interfered somewhat with the hay harvest; it is, however, being actively carried on.

The meadows, both natural and artificial, have in general suffered from drought, and the yield is only moderate as to quantity. In the irrigated meadows the yield is very satisfactory both as to quality and quantity.

The appearance of the other crops is generally good. The cereals have suffered slightly from drought, which has delayed their growth, but favorable weather has partly repaired the injury; except rye, the appearance of which is not satisfactory, the cereal crops appear in good condition.

The growth of beans, pease, and flax indicate a good crop; that of colza will be only moderate.

The condition of the potatoes gives promise of an abundant crop. The fruit trees likewise promise a good crop.

On the whole, everything indicates that if the weather does not alter the present conditions the year 1883 will be good for our agriculturists.

CROPS OF SILESIA.

REPORT BY CONSUL DITHMAR, OF BRESLAU.

I have the honor to forward herewith some estimates of this year's harvests in Silesia, from which it will be seen that though the province may produce enough for its own consumption, it will not have much left for export.

If the rest of Europe—and the reports received here from Russia are not considered very promising—does not yield more abundantly, there will be need for large shipments from the United States.

Last winter, I learn, American wheat and flour were for the first time brought to the Breslau market.

My informant, with a shrug of his shoulders, declared that they were by no means equal to the home product, both millers and bakers being averse to using them.

This curious prejudice—and the gentleman I refer to is a merchant of otherwise liberal views—will no doubt in time give way to a more enlightened and correct judgment, and not only our wheat and flour, but many other American products and manufactures, find a market here.

HENRY DITHMAR,
Consul.

UNITED STATES CONSULATE,
Breslau, July 21, 1883.

[Inclosure.]

The cutting of wheat and rye began about a week ago, both in the most southern and the most northern parts of this province; near Ratibor, in the extreme south, not far from the Austrian frontier, and in the vicinity of Grünberg, a point projecting northward between the provinces of Brandenburg and Posen.

Owing to the lack of a snow covering for the growing crops during the winter, and the cold backward spring, the harvest prospects early in May were very discouraging, while in some districts the hail-storms and inundations destroyed all hopes of any remuneration for the labor of tilling and planting.

Although, owing to the unusually hot weather and frequent showers, the wheat and rye harvesting time set in earlier than usual, the prospects are that the yield, both in grain and straw, will be much below an average one.

The reports of the agricultural societies on the growing crops, which were made this year later than usual, give the following as the probabilities for the province, 100 standing for an average good crop:

Wheat	79.52	Potatoes	89.91
Rye	80.98	Clover hay	71.17
Barley	91.50	Meadow hay	81.38
Oats	90.87	Rapeseed	67.36
Legumes	86.11		

These figures, although more moderate than the estimates of former years, are still in my opinion—based upon observation and experience—too high.

Rapeseed will be but little more than half a crop, and the advance in prices this may necessitate should be availed of by manufacturers of mineral lubricating oils for the introduction of their produce here.

The estimates by districts for the three administrative districts into which Silesia is divided are as follows:

[100 = average good crop.]

Crop.	Upper Silesia.	Middle Silesia.	Lower Silesia.
Wheat	83.57	76.72	78.26
Rye	82.38	78.83	81.74
Barley	94.29	91.08	89.13
Oats	98.00	89.58	85.22
Leguminous plants	88.82	86.42	83.09
Potatoes	88.69	90.38	90.75
Clover hay	82.62	55.44	75.45
Meadow hay	92.38	76.33	75.43
Rapeseed	58.09	60.14	77.88

AUSTRALASIAN AGRICULTURE.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The harvest which has just closed was one of the most bountiful in the history of the colonies. The statistics giving the total results of the same will not be published until July. The yield of wheat in some of the districts was disappointing, but upon the whole the average will be much larger than usual. The harvest is over in all the Australasian colonies in the month of March, and in South Australia much earlier than that. A return of the produce of wheat of the latter colony has been forwarded me from Adelaide, and it shows a slight increase over the yield of last year. In 1882 South Australia had under wheat 1,768,781 acres, and the yield was 8,087,032 bushels. In 1883 the same colony had 1,820,000 acres under wheat, and the yield shows an average of 4 bushels and 32 pounds per acre, making the total wheat crop of South Australia 8,266,666 bushels, an increase of 179,631 bushels over 1882. The yield, after providing for seed and home consumption, will allow 120,000 tons for export. In the northern and southeastern districts the crops ranged from 10 to 22½ bushels per acre, and thus helped to raise the average for the whole colony. At one time South Australia was the premier colony in wheat production of the Australasian group, but such is not now the case. Instead of occupying the first place she is the third on the list. In 1873 South Australia produced 2,000,000 bushels of wheat more than Victoria, and nearly twice as much as New Zealand. In 1882 Victoria headed the list with 8,714,377 bushels, and New Zealand followed with 8,297,890, while the total yield in South Australia was 8,087,032 bushels. New South Wales followed with 3,405,966; Tasmania, 977,365; Western Australia, 153,657; and Queensland, 39,611. The total quantity of wheat produced in 1873 in Australasia was 17,936,715 bushels. In 1882 the amount increased to 29,675,899 bushels. As the total population of the group is about 3,000,000, it will be seen that the quantity produced was more than sufficient to feed twice that number of people.

LAND UNDER CULTIVATION.

The land under cultivation in Victoria was 1,821,719 acres; New South Wales, 706,498 acres; Queensland, 128,075 acres; South Australia, 2,613,000 acres; Western Australia, 53,353 acres; total Australia, 5,323,548 acres; Tasmania, 374,374 acres; New Zealand, 1,319,460 acres; total Australasia, 7,017,382 acres.

Land under wheat.—Victoria, 926,729 acres; New South Wales, 252,540 acres; Queensland, 4,708 acres; South Australia, 1,768,781 acres; Western Australia, 21,951 acres; total Australia, 2,974,709 acres; Tasmania, 51,757 acres; New Zealand, 365,715 acres; total Australasia, 3,392,181 acres.

Land under oats.—Victoria, 146,945 acres; New South Wales, 17,923 acres; Queensland, 88 acres; South Australia, 3,023 acres; Western Australia, 827 acres; total Australia, 168,806 acres; Tasmania, 27,535 acres; New Zealand, 243,387 acres; total Australasia, 439,728 acres.

Land under barley.—Victoria, 48,652 acres; New South Wales, 7,890 acres; Queensland, 256 acres; South Australia, 11,953 acres; Western Australia, 3,679 acres; total Australia, 72,430 acres; Tasmania, 4,597 acres; New Zealand, 29,808 acres; total Australasia, 106,835 acres.

Land under potatoes.—Victoria, 39,129 acres; New South Wales, 18,996 acres; Queensland, 5,086 acres; South Australia, 6,136 acres; Western Australia, 278 acres; total Australia, 69,625 acres; Tasmania, 9,670 acres; New Zealand, 22,540 acres; total Australasia, 100,835 acres.

Land under hay.—Victoria, 212,150 acres, New South Wales, 130,443 acres; Queensland, 16,926 acres; South Australia, 333,467 acres; Western Australia, 24,445 acres; total Australia, 717,431 acres; Tasmania, 34,790 acres; New Zealand, 64,423 acres; total Australasia, 820,644 acres.

Land under other tillage.—Victoria, 448,114 acres; New South Wales, 278,700 acres; Queensland, 101,011 acres; South Australia, 490,543 acres; Western Australia, 2,173 acres; total Australia, 1,320,547 acres; Tasmania, 246,025 acres; New Zealand, 589,587 acres; total Australasia, 2,156,159 acres.

The following is a statement of the produce of oats, barley, potatoes, and hay:

Produce of oats.—Victoria, 3,612,111 bushels; New South Wales, 356,121 bushels; Queensland, 1,121 bushels; South Australia, 32,219 bushels; Western Australia, 8,270 bushels; total Australia, 4,009,842 bushels; Tasmania, 783,129 bushels; New Zealand, 6,924,848 bushels; total Australasia, 11,717,819 bushels.

Produce of barley.—Victoria, 927,566 bushels; New South Wales, 160,062 bushels; Queensland, 3,207 bushels; South Australia, 137,165 bushels; Western Australia, 36,790 bushels; total Australia, 1,265,330 bushels; Tasmania, 102,475 bushels; New Zealand, 664,093 bushels; total Australasia, 2,031,898 bushels.

Produce of potatoes.—Victoria, 134,290 tons; New South Wales, 51,936 tons; Queensland, 11,984 tons; South Australia, 18,154 tons; Western Australia, 556 tons; total Australia, 216,920 tons; Tasmania, 33,565 tons; New Zealand, 121,890 tons; total Australasia, 372,375 tons.

Produce of hay.—Victoria, 238,796 tons; New South Wales, 173,074 tons; Queensland, 19,640 tons; South Australia, 240,827 tons; Western Australia, 18,334 tons; total Australia, 690,671 tons; Tasmania, 44,957 tons; New Zealand, 89,081 tons; total Australasia, 824,709 tons.

The average produce per acre.—The average produce per acre of wheat was: Victoria, 9.40 bushels; New South Wales, 14.69 bushels; Queensland, 8.41 bushels; South Australia, 4.57 bushels; Western Australia, 7 bushels; total Australia, 6.96 bushels; Tasmania, 18.88 bushels; New Zealand, 22.69 bushels; total Australasia, 8.84 bushels.

Average produce per acre of oats.—Victoria, 24.57 bushels; New South Wales, 19.87 bushels; Queensland, 12.74 bushels; South Australia, 10.66 bushels; Western Australia, 10 bushels; total Australia, 23.75 bushels; Tasmania 28.44 bushels; New Zealand, 28.45 bushels; total Australasia, 26.65 bushels.

Average produce per acre of barley.—Victoria, 2,457 bushels; New South Wales, 20.35 bushels; Queensland, 12.53 bushels; South Australia, 11.47 bushels; Western Australia, 10 bushels; total Australia, 17.47 bushels; Tasmania, 22.29 bushels; New Zealand, 22.28 bushels; total Australasia, 16.02 bushels.

Average produce per acre of potatoes.—Victoria, 3.43 tons; New South Wales, 2.73 tons; Queensland, 2.36 tons; South Australia, 2.96 tons; Western Australia, 2 tons; total Australia, 3.12 tons. Tasmania, 3.47 tons; New Zealand, 5.41 tons; total Australasia, 3.66 tons.

Average produce per acre of hay.—Victoria, 1.13 ton; New South Wales, 1.33 ton; Queensland, 1.16 ton; South Australia, .72 ton; Western Australia, .75 ton; total Australia, .96 ton; Tasmania, 1.29 ton; New Zealand, 1.30 ton; total Australasia, 1 ton.

During the years from 1874 to 1881 the highest average production of wheat to the acre in New Zealand was in 1876, when it was 31.54. The mean of the seven years was 27.29. The next highest average amongst the colonies was that of Tasmania, with 18.25, but as the total production in that colony was only 750,000 bushels, it ought perhaps not to be admitted to comparison. The mean production of wheat per acre for the seven years in the other colonies was as follows: Victoria, 13.03; New South Wales, 14.49; Queensland, 10.76; South Australia, 8.80; Western Australia, 12.05. In making a comparison of the production of wheat per acre between the colonies and England, New Zealand is the only one that in this respect surpasses the mother country. The average produce of wheat in England for the fourteen years preceding 1879 (inclusive) was 26½ bushels per acre, and in 1879 the production was as low as 18 bushels. The high average yield of wheat per acre is often brought about by an improved system of farming, but in some countries, as, for instance, in the agricultural portion of Washington Territory, the land is so rich as to require but little skill at the hands of the farmer. This magnificent Territory, now a candidate for admission into the Union as a State, covers an area of 70,000 square miles, aggregating 450,000,000 acres. It has a splendid front on the Pacific, with the admirable outlet and inlet of Puget Sound, and rivers which afford 2,000 miles of internal navigation. The yield of wheat in that Territory averaged last year 35 bushels to the acre. In England very great pains are taken in the cultivation of wheat. The supply of land being limited, the utmost skill is employed in fertilizing the soil; and, moreover, the harvesting there is always very closely done.

The production of wheat in France is 16.2 bushels per acre; in Saxony, 22.5; Belgium, 26.2; while in Russia it is as low as 5.5 bushels. The figures I have given are sufficient to show the proud position New

Zealand occupies in wheat production per acre; still I must mention that farming is done here on the rotation plan so universally practiced in England. Besides changing the crops every year, or allowing the land to rest, the farmers of New Zealand import annually about 5,000 tons of bone-dust and 2,000 tons of guano for the purpose of enriching the soil. In all the crops the superiority of New Zealand to the other Australasian colonies is conspicuous. The mean average of the seven years in New Zealand for oats was 33.42 bushels to the acre, while Victoria gave 19.57 bushels, New South Wales, 19.44, and South Australia, 13.07. The average of potatoes to the acre was: in New Zealand, 5.13 tons; in Victoria, 3.27 tons; in New South Wales, 2.96 tons; in Queensland, 2.42 tons; in South Australia, 3.35 tons.

In this connection I will mention that New Zealand oats have won great reputation in European markets on account of their superior quality. It is perhaps not generally known that there is a very great difference in the quality of this kind of grain, and that much depends on the weight per bushel. While one bushel of oats will weigh only 24 pounds another bushel will weigh 48 pounds. It is seldom that New Zealand oats, and especially those grown in the north island and in the northern part of the south island, weigh less than from 40 to 48 pounds per bushel. It will be well enough for the New Zealand farmer not to lose sight of the extra weight of his oats, for it is the custom in European markets to buy by the quantity and to sell by weight.

DIFFERENT VARIETIES OF WHEAT.

The quality of wheat grown in New Zealand is also worthy of praise. There are several varieties peculiar to the colony, and which have been successfully introduced into Victoria, New South Wales, and South Australia, among which I shall mention the celebrated New Zealand Sharman wheat. This variety is a bearded wheat, free from red rust and smut, and yields a small but plump grain. It has a thin, hard, wiry straw of a peculiar brightness, about 3 feet 4 inches in height, bearing heads from 3 inches to 4 inches in length, and containing from 50 to 60 grains each. Dr. Schomburgh, who is an authority on agriculture in Australasia, classes the Sharman wheat along with the celebrated American brands, the Defiance and Champlain. The two latter he thinks superior to all others. Their earliness, combined with great vigor and rust-resisting properties, make them very popular in this climate. The Defiance displays great productiveness and hardiness. It is a beardless, white-chaff wheat, with heads frequently 3 inches to 5 inches long, very closely set, with large kernels, often numbering from 60 to 80. The Champlain is also very productive. It is a bearded wheat and yields a plump red-colored grain. Its strong and vigorous straw stands erect, about 3 feet 8 inches high, bearing heads from 3 inches to 5 inches in length, and contains from 60 to 70 kernels each. Velvet wheat is largely used in New Zealand for winter, and the Tuscan for spring wheat.

COST OF WHEAT PRODUCTION PER ACRE.

The cost of growing wheat in New Zealand is becoming less and less every year. The progress made in the art of farming and the very general introduction of American machinery are the principal reasons for the change. To illustrate more fully the progress made within the last few years, I will state that Messrs. Ellis & Brothers, the owners of the celebrated Five Rivers estate, Southland, grew wheat in the year 1880 at the cost of 92 cents per bushel, inclusive of charges for delivering the same on board ship. The cost was estimated from an average yield of 16 bushels per acre, as follows: Cost of putting in crop, $3.75 per acre; reaping and stacking, $3.93 per acre; thrashing and delivering on board, at the rate of 17 cents per bushel, $2.72; for rent and seed, $4.50 per acre, equal to $14.90. The same tract of land yielded in February, 1883, an average of 22½ bushels per acre, and the cost of production was as follows: Putting in crop and stacking, $6.06; thrashing and delivering on board, 17 cents per bushel, $2.87 per acre, equal to $8.93, or 64 cents per bushel. Messrs. Ellis & Brothers employed in their last harvest a large number of McCormick's wire reapers and binders, seven of which were kept running day and night, and cut on an average 140 acres per day, or 20 acres to each reaper.

NUMBER OF FARMERS.

There are in the Australasian colonies 167,800 persons engaged in agricultural pursuits, of which 54,468 reside in New Zealand. It is reasonable to expect that this number will soon be largely increased, as new land is being opened up every year and the governments of all the colonies are giving especial attention to the immigration of farmers from European countries. There is throughout all Australasia a steady demand for skilled labor. The wages paid to farm hands are in advance of the wages last year, and range from $4.50 to $5.50 per week, with board and lodging. Harvesters and teamsters get from $6 to $7.50 per week, with board and lodging.

EXPORTS OF NEW ZEALAND GRAIN.

The total value of the exports of grain from New Zealand for the year ending December 31, 1882, was $4,860,660, against $4,933,925 for 1881. Of these exports wheat amounted to $3,781,120; oats, $790,775, and barley, $164,120. The following table shows the quantity and value of the exports of grain since 1872:

Table showing the quantity and value of the various kinds of grain exported from the colony of New Zealand for each year from 1872 *to* 1882, *inclusive.*

Years.	Kinds of grain.	Quantity.	Value.
		Bushels.	
1872	Wheat	477,465	$556,095
	Barley	11,537	12,320
	Malt	3,595	5,965
	Oats	565,901	320,075
	Total	1,058,489	894,455
1873	Wheat	538,227	643,095
	Barley	247	560
	Malt	1,470	3,770
	Oats	49,487	36,735
	Total	589,431	684,160
1874	Wheat	933,314	1,181,770
	Barley	90,081	113,175
	Malt	3,428	6,655
	Oats	135,959	153,915
	Total	1,162,782	1,455,515
1875	Wheat	548,095	575,465
	Barley	91,622	102,730
	Malt	6,885	12,550
	Oats	630,325	466,340
	Total	1,276,927	1,157,085

Table showing the quantity and value of the various kinds of grain, &c.—Continued.

Years.	Kinds of grain.	Quantity.	Value.
		Bushels.	
1876	Wheat	686, 059	$765, 835
	Barley	218, 558	1, 092, 790
	Malt	3, 524	5, 185
	Oats	1, 263, 957	705, 410
	Total	2, 172, 098	1, 689, 390
1877	Wheat	859, 795	1, 020, 785
	Barley	107, 707	119, 360
	Malt	1, 746	3, 355
	Oats	354, 694	338, 880
	Total	1, 313, 942	1, 382, 380
1878	Wheat	1, 701, 013	2, 115, 160
	Barley	102, 472	122, 330
	Malt	5, 951	10, 685
	Oats	302, 772	295, 650
	Total	2, 112, 208	2, 563, 825
1879	Wheat	2, 518, 457	2, 604, 030
	Barley	106, 692	135, 655
	Malt	2, 546	12, 730
	Oats	842, 649	848, 310
	Total	3, 470, 344	3, 802, 785
1880	Wheat	3, 120, 463	3, 164, 715
	Barley	476, 520	423, 915
	Malt	35, 320	58, 045
	Oats	1, 918, 132	848, 310
	Total	5, 540, 435	4, 494, 990
1881	Wheat	3, 761, 258	13, 806, 290
	Barley	494, 911	2, 474, 555
	Malt	60, 747	89, 685
	Oats	1, 499, 260	712, 845
	Total	5, 816, 176	986, 126
1882	Wheat	3, 388, 622	3, 781, 120
	Barley	163, 334	164, 120
	Malt	29, 345	45, 890
	Oats	999, 684	790, 975
	Seeds	51, 120	78, 755
	Total	4, 632, 105	4, 860, 860

NEW ZEALAND EXPORT OF FLOUR.

The export of flour from New Zealand during the year 1882 was larger than that of any previous year. It showed an increase of 9,475 tons over the export for the year 1881, and 6,812 tons over 1880.

I give below a table showing the quantity and value of the exports of flour from New Zealand since 1872.

Table showing the quantity and value of the exports of flour from the colony of New Zealand for each year from 1872 to 1882, inclusive.

Years.	Quantity.	Value.
	Tons.	
1872	519	$38, 700
1873	943	60, 350
1874	2, 226	137, 740
1875	648	39, 325
1876	497	35, 285
1877	960	71, 595
1878	4, 032	242, 555
1879	1, 282	67, 305
1880	557	30, 380
1881	3, 221	175, 040
1882	10, 932	599, 025

It will be seen from the above table that there has always been great fluctuation in the quantity of these exports. In 1873 the quantity was 943 tons, and in 1874 it increased to 2,226 tons, and in 1877 the amount fell to 960 tons, and rose in 1878 to 4,032 tons, and in 1882 to 10,932 tons. This fluctuation is partly due to amount of flour available for export and to the demand for breadstuffs in foreign markets. Great improvement has been made within the last few years in the manufacture of flour in New Zealand, and one Auckland firm, celebrated for its superior brands, has received a contract for supplying the French Government at New Caledonia with flour.

The increase in the export of New Zealand flour has awakened great competition amongst the millers, and some of their brands command a higher price than would be expected from the cost of wheat.

AMERICAN FLOUR.

There has also been in the United States a vast increase in the exports of flour. Indeed, the increase is so large as to indicate that the American merchant will find it much more profitable in the future to export flour than grain. The increase for the six months ended December 31, 1882, as compared with the same period for the year previous, was 560,000 barrels, or at the rate of 1,120,000 barrels per annum. There is now no longer a prejudice existing against American flour in the European markets. In fact, its superior quality has become proverbial. The extraordinary increase in the exports furnishes the strongest possible evidence of the activity of the American flour-mills, and there is every reason to believe that the production of flour will increase in the future in quite as great a ratio as in the past. It has been estimated that the harvest in the United States for 1883 will be followed by an export of over 10,000,000 barrels of flour.

DIFFICULTIES OF SHIPPING GRAIN.

Grain is not shipped in New Zealand nor in any of the Australasian colonies with that skill and expedition so universally practiced in the United States. Indeed, even in the large grain centers of this colony, very little attention is paid to forwarding that class of grain capable of standing a long voyage and commanding a good price in foreign markets. It is indeed deplorable to witness the vast amount of labor, to say nothing of the great length of time, spent over the transportation of grain from the farm to the ship. The sacks, in the first place, are too large and heavy (each sack containing 4½ bushels of grain) to be handled with anything like ease. In putting the sacks on and off the trucks, and in the hold of the ship, the men are obliged to use hooks, which of course do great harm. If the American system were adopted much time would be saved which is now lost in the old-fashioned and tedious method of weighing the grain. The farmer is at present paid for the weight of his grain per bushel; wheat at 60 pounds per bushel, barley 50 pounds, and oats 40 pounds per bushel. If the grain were put in 100-pound sacks at the machine, as in the United States, he would know how much grain he had as soon as the last cental left his farm, whereas now he has to wait several days for his grain to be discharged and weighed. The European importers are constantly drawing comparisons favorable to the manner in which grain is shipped in the United States, as against that practiced in the Australasian ports. It is no exaggeration to say that it takes about as many weeks here as it would days in the United States to load a ship with grain. When the crops increase, which they are very likely to do in the near future, the disadvantages of the present system will become so patent that the people, it is hoped, will be forced to make the change.

RICH AGRICULTURAL LANDS.

The best wheat in New Zealand is grown in the south (or middle) island, where also the largest yield per acre is obtained. Land in Otago, and in the rich agricultural districts of Canterbury, has steadily advanced in value. The alluvial soil of the lower part of Canterbury Plains and Southland are said to be the most remarkable for fertility, but according to the opinion of Dr. Hector, the colonial geologist, the low, rolling downs of the south island formed by the calcareous rocks of the tertiary formations which skirt the higher mountain masses, and which frequently have their quality improved by the disintegration of interspersed balsatic rocks, rank second to no other land in the colony. The soil in the province of Taranaki (north island) is also very rich. There the surface soil is formed by the decomposition of calcareous marl which underlies the whole country, intermixed with the debris of the lava streams and tufaceous rocks of the extinct volcanic mountains. The richest districts in the north island have not yet been fully explored. In that island the soil is well watered and the seasons always favorable. Of course it is not to be expected that wheat will grow too far north, as the climate is warmer there (the seasons being reversed south of the equator) and the rainfall more frequent in harvest time, making the grain liable to sprout. The trouble heretofore in the north island has been that the best land was in the possession of the Maoris or natives, and the Europeans were forbidden to enter the Maori king country. Vast tracts of land were blocked up in this way, but now a change has taken place. The natives, through the firmness and energy of the New Zealand Government, have agreed to permit the construction of a railway through the proscribed region, which will result in opening up for settlement over 14,000,000 acres of the most fertile land in the southern hemisphere.

MATAMATA.

The most extensive farm in the north island is the celebrated Matamata estate, belonging to Mr. J. C. Firth, one of the ablest and most public spirited of the early settlers of this colony. Matamata is about 65 miles from the city of Auckland, and contains over 60,000 acres of freehold land, four-fifths of which consist of excellent light soil, admirably suited for grass, clover, and root crops. The remaining portion is of a hilly and undulating nature, and well adapted to the growth of grain. Only about 13,000 acres have as yet been put under cultivation, of which 2,500 acres are used for wheat. The storage buildings at the wharf on the Waihon River are very fine ones, and here Mr. Firth's steamers load and discharge their cargoes. All the stations on the farm are connected with one another by the telephone, and traction engines are used instead of drays and horses for carrying large loads between the stations and landing place.

The agricultural machinery and implements, a large part of which is of American manufacture, cost over $35,000. Mr. Firth is making preparations to put a larger portion of his land under wheat than heretofore, and all the latest American agricultural implements have been imported from the United States for that purpose. I was fortunate enough to visit his farm during the harvesting, and the velvet winter wheat I saw thrashed there was, I think, the finest ever grown in any part of the world.

WHEAT IN THE SOUTH ISLAND.

The yield of the present harvest in various parts of the South Island is unusually large. Mr. E. Menlove, of Windsor Park, has obtained an average of over 50 bushels to the acre from 350 acres. At Totara, Mr. R. McAuly obtained 65 bushels per acre from 300 acres. Mr. William Clark, of Cave Valley, got 64 bushels per acre from 130 acres, and on 300 acres of land belonging to Mr. William Meek, of wheat in the same district, an average of 72 bushels per acre was obtained. In fact, I have not heard of a single farm in the South Island where an average has been less than 30 bushels per acre.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, New Zealand, April 20, 1883.

SAXON HOUSE-INDUSTRY.

REPORT BY CONSUL BULLOCK, OF ANNABERG.

The consular district of Annaberg, which embraces the greater part of the Saxon Erzgebirge (ore mountains) and Voigtland, is one of the most important industrial districts of Germany.

The district owes its prosperity and commercial importance mainly to its well-organized house-industry. This form of industry, as distinguished from factory industry, is that in which the laborers manufacture at their own homes or workshops articles for the wholesale dealers or merchant manufacturers. It is diversified in its forms and manifold in its productions. As it is met with in this district, the laborers work in their own homes or workshops, with their own tools and appliances, alone or with assistants, journeymen and apprentices, who are often all members of the same family. Those who employ assistants not members of their own families, and provide for them tools, material, and a place to work, are called masters. They are the skillful, industrious, and provident of their class. In the country, especially in fertile agricultural districts, the house-industry is generally a secondary employment, and is only followed during the winter months, or when the weather does not admit of outdoor work.

Generally, a wholesale dealer or merchant manufacturer furnishes the laborer or master workman the raw material, prescribes the form and kind of production, and pays a stipulated price per piece for the articles made and delivered. In some branches, for example, straw-plaiting and wood-carving, the laborer furnishes the material. Tools and machinery are sometimes provided by the employers, and are paid for by the laborers in small installments.

The house-industry has many advantages for the laborer over the factory industry. The work is done at home and all the members of the family capable of working are more or less employed. Children are not separated from their parents nor husbands from their wives. The women can care for their children and households and the daughters remain under the control and protection of the family. The hours of labor are not fixed, and the labor itself is of a kind least injurious to health. In the country during the summer months the labor can mostly be performed in the open air, or alternated by more healthful labor in the fields. All the available working force of the family, without danger to the person or detriment to the morals, can be brought into profitable employment, and the concentration of large numbers of laborers in one place avoided. Such are some of the advantages of the house-industry. It has, however, its disadvantages. It can easily lead to great and lasting injury of children by stunting their bodily and mental development, since legal control and regulations are not easily applied and are difficult of enforcement.

Unfavorable seasons, stagnation in trade, and commercial crises immediately affect those engaged in the house-industry, while they seldom reap their legitimate share of the benefits of the times of prosperity. Low earnings in times of long business depression often lead to injurious overexertion, which in turn leads to poor work and endangers the source of livelihood. But notwithstanding these drawbacks, the house-industry is, taken all in all, so much more favorable for the social and domestic relations of the laborers and their healthful development than any other form of productive industry, agriculture alone excepted, that it is a matter of regret that it is so limited in its applicability. Modern inventions have narrowed the field of its profitable employment until few articles are left for its production. It can only exist where it is technically impossible or impracticable to employ large and expensive machinery in cheap and manifold production, or where a division of labor will not materially reduce the cost of production. These conditions still exist in the following branches of industry: Straw-plaiting, basket-making, wood-carving, glove-making, fine embroidering, and lace and *passementerie* making, the manufacture of artificial flowers, millinery goods, small articles of *vertu*, and inlaid work.

Nearly all of these branches of industry are represented in this district, and provide the means of sustenance for hundreds of families.

In Annaberg and its vicinity pillow or cushion laces and *passementerie* (gimps, trimmings, &c.) are the principal articles of production. Their manufacture is well adapted to the conditions of a thickly populated and mountainous region where agriculture is not remunerative, and where there are no large factories to give employment to the people. The requirements for manufacturing pillow-lace are few and simple. The necessary implements, material, and finished goods occupy but little room, and the implements can be provided at a very small cost. The principal implements for making this lace is a cylinder-formed cushion or pillow, over which a strip of paper stamped with the pattern to be worked is laid. The bobbins complete the outfit. These are little pieces of wood, 4 to 6 inches long, turned exactly in the shape of drumsticks, upon which the threads are wound and over which there are wooden shells for keeping the threads clean. As many threads as the pattern requires are wound upon as many bobbins, and their ends tied together and fastened to the cushion from which the bobbins hang.

The number of bobbins is according to the width of the lace, and varies from 20 to 100. The pattern is fastened to the cushion by pins which mark the form of the meshes, and the number of pins depends upon the width of the pattern and fineness of the meshes. The meshes are formed by a skillful manipulation of the bobbins, and as the lace is finished the pins are moved forward.

The dexterity and nimbleness of finger displayed by the lace-makers are truly astonishing, and can only be attained by years of practice begun in early childhood. Children frequently begin to learn lace-making at the early age of five, and when they are of school age they are admitted to the schools for lace-makers, where they spend the greater part of the time not required by their attendance at the elementary schools.

In order to provide better instruction in lace-making and introduce new and different kinds of laces and methods of making them, the Royal Saxon Government has encouraged the establishment of lace-schools by granting them an annual pecuniary aid. But the municipalities generally bear the greater part of the expense of these schools.

In 1843 Herr Schreiber, a wealthy merchant of Dresden, conceived the idea of introducing the manufacture of Brussels lace into Saxony, and in pursuance thereof he undertook a journey to Holland, Belgium, and France, accompanied by a young man who was known for his great cleverness and skill in designing and making laces. After Herr Schreiber and his *protégé* had obtained a thorough knowledge of the methods of manufacturing laces in these countries, they returned home, and the year following succeeded, after persistent effort, in having established at Oberwiesenthal, on the Bohemian frontier, a school of instruction in lace-making, with the special object of preparing teachers in the art of making Brussels lace.

The experiment was from the beginning a decided success, and was not long in finding imitation in other towns and villages. In these schools, of which the one at Schneeberg is the most important, the instruction is entirely technical, and is confined solely to lace-making.

The lace made at the schools is sold, and the proceeds, sometimes no inconsiderable sum, are applied towards payment of current expenses. The school at Schneeberg is for teachers only. It provides instruction in designing patterns and making the finer kinds of laces. Its success has been very marked, and the recent progress in the Saxon lace industry towards regaining its former importance is in a great measure owing to the influence of this school.

The lace trade does not differ in its organization from that or other products of the house-industry.

Formerly lace-markets were held, where the lace-makers offered their goods for sale. The most important of these markets was the one held at Annaberg; but now the lace-makers generally work for the wholesale dealers, most of whom have their places of business in Annaberg or Buchholz.

The wholesale dealer furnishes the material and prescribes the pattern and quality of goods to be made and the time of delivery of the same. Experience has shown this method to be the most advantageous for both laborers and merchants. The latter quickly discern what kinds of patterns and laces are in favor with the fashionable world, and can most readily effect a timely change in the production.

PASSEMENTERIE.

Another important house-industry which flourishes in this district, the products of which are largely exported to the United States, is the manufacture of *passementerie.* Under the term *passementerie* are included plain and beaded gimps and trimmings, and dress and furniture ornaments, &c. This industry is said to owe its introduction into Saxony to refugees from the Netherlands, who fled from the persecutions of the Duke of Alva. Simple and inexpensive machines, which occupy but little space, and which almost always belong to the laborer, are now generally used by the *passementerie*-maker. Since 1866 this industry has greatly increased, and it is estimated that in this consular district 25,000 to 30,000 persons—men, women, and children—gain their living by making *passementerie*.

At Buchholz, near Annaberg, there is a well-attended *passementerie* school, which is partly supported by the municipality and partly by the Royal Government. This school has been of great service in sending out skillful workers and teachers, and has done a great deal towards the promotion of the industry by introducing new and improved methods and kinds of production. To it is partly attributable the ability of the Saxon *passementerie* industry to compete successfully with that of France.

The annual exportations of *passementerie* from this consular district to the United States amount in declared value to about $1,500,000.

MUSICAL INSTRUMENTS.

An important and growing industry of this district is the manufacture of musical instruments. The principal seat of this industry is at Markneukirchen, called the Saxon Cremona, a place of 6,000 to 7,000 inhabitants. From a small beginning it has gradually and against many obstacles developed into a flourshing industry, which gives many thousands of hands steady and remunerative employment. It owes its foundation to Bohemian exiles, who were driven from their homes on account of their religious faith after the close of the thirty years' war.

It would be tedious to recite all the phases of the development of this industry into its present proportions. It now includes the manufacture of stringed and wind instruments of every description, and gives employment to the inhabitants of thirty villages, of which Markneukirchen and Klingenthal are the most important.

Through all the stages of its progress and against the competition of machinery and the advantages of accumulated capital, the manufacture of musical instruments in Saxony has maintained its character as a house-industry. The workmen finish the instruments in their own workshops, and sell them to the wholesale dealers. There are only a few factories in which any considerable number of hands are employed, and these are almost exclusively engaged in the manufacture of brass instruments. Formerly the merchant manufacturers furnished the material, and deducted its price on delivery of the finished articles; but this practice has almost entirely ceased. The material is now generally furnished by special dealers, who demand cash payment. The imitation of the productions of the celebrated old violin-makers is a special branch of the Markneukirchen industry, which has of late years attained great importance. The violins made by the old masters, Stradivâri, Guarneri, Amati, Maggini, Stainer, and others, are not only imitated in form, but the marks of the old masters and the semblance of antiquity are reproduced with such perfection that even experts have often declared the imitations to be genuine. It requires great skill and experience to make these imitations, and comparatively high prices are paid for them. They find sale at home and abroad; but Russia and the United States are said to be the best markets for them. It is quite possible that in the great majority of instances the happy possessors of "old cremonas," of whom we frequently read notices in the American newspapers, own, after all, only Markneukirchen imitations.

Following is a statement of the exports from this consular district to the United States for the first quarter of 1883:

Buttons and button covers	**$20,332**
Dress trimmings	**163,780**
Embroideries	**41,326**
Kid gloves	**61,410**
Laces	**23,391**
Musical goods	**220,280**
Sundries	**2,273**
Total	**532,792**

GEO. E. BULLOCK,
Consul.

UNITED STATES CONSULATE,
Annaberg, Saxony, May 26, 1883.

THE LINEN INDUSTRY OF THE UNITED KINGDOM.

SEVENTEEN STATISTICAL TABLES, PREPARED BY CONSUL WOOD, OF BELFAST.

Importations of flax and tow into the United Kingdom in the months of January, 1883, *February and March,* 1883, *and the corresponding months of* 1882.

From—	January.		February.		March.	
	1882.	1883.	1882.	1883.	1882.	1883.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Belgium	1,459	1,588	1,494	1,542	1,667	1,396
Germany	445	131	44	551	221	269
Holland	634	403	758	639	937	622
Russia	2,958	233	1,335	931	1,030	673
Other countries	215	319	434	294	243	219
Total	5,711	2,674	4,065	3,957	4,098	3,179
Total value	£274,418 $1,335,455 20	£157,862 $768,235 42	£217,487 $1,058,400 49	£198,918 $968,034 45	£226,462 $1,102,077 32	£167,215 $813,752

Exports of linen yarns from the United Kingdom during the months of January, February and March, 1882, *and corresponding months in* 1883.

To—	January.		February.		March.	
	1882.	1883.	1882.	1883.	1882.	1883.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Belgium	123,700	165,900	155,500	158,100	205,700	169,900
France	143,600	156,000	158,100	125,500	176,400	185,000
Germany	143,900	136,700	207,400	139,400	201,500	254,200
Holland	212,700	170,100	143,200	213,200	232,600	259,900
Italy	107,200	43,100	661,000	26,600	79,300	45,300
Spain and Canaries	680,100	650,900	661,700	452,700	766,100	355,300
Other countries	375,000	157,800	279,400	195,300	250,600	109,800
Total quantity	1,786,200	1,480,500	1,674,200	1,310,800	1,912,200	1,329,400
Total value	£97,312 $473,568 85	£83,233 $405,053 40	£91,189 $443,771 27	£76,947 $374,462 58	£106,232 $516,978 03	£85,341 $415,311 98

Exports of linen piece goods from the United Kingdom during the month of January, 1883, *and the corresponding month of* 1882.

To—	1882.	1883.
	Yards.	*Yards.*
Australia	1, 406, 900	1, 189, 200
Brazil	442, 400	172, 800
British India	193, 300	352, 500
British North America	652, 700	857, 200
British West Indies	249, 400	241, 700
Foreign West Indies	946, 800	1, 591, 800
France	299, 400	369, 400
Germany	367, 200	283, 600
Italy	171, 200	171, 900
Spain and Canaries	220, 300	211, 200
United States of America	12, 146, 700	10, 593, 200
United States of Colombia	147, 000	290, 900
Other countries	1, 505, 100	1, 327, 300
Total quantity	18, 748, 400	17, 652, 700
Total value	£537, 535 $2, 615, 914 08	£500, 797 $2, 437, 128 61

Exports of linen piece goods from the United Kingdom during the month of February, 1883, *and the corresponding month of* 1882.

To—	1882.	1883.
	Yards.	*Yards.*
Australia	986, 500	791, 400
Brazil	345, 800	235, 500
British East Indies	190, 700	244, 200
British North America	550, 000	636, 900
British West Indies	393, 300	244, 000
Foreign West Indies	1, 047, 200	1, 193, 800
France	427, 600	466, 100
Germany	315, 800	307, 800
Italy	128, 300	160, 800
Spain and Canaries	193, 700	210, 100
United States of America	9, 965, 300	9, 946, 000
United States of Colombia	127, 500	150, 300
Other countries	1, 771, 500	1, 403, 800
Total quantity	16, 443, 200	15, 990, 700
Total value	£448, 461 $2, 182, 435 46	£477, 561 $2, 324, 050 61

Exports of linen piece goods from the United Kingdom during the month of March, 1883, *and the corresponding month of* 1882.

To—	1882.	1883.
	Yards.	*Yards.*
Australia	965, 000	702, 900
Brazil	228, 600	198, 600
British West Indies	223, 600	252, 800
British East Indies	246, 600	249, 500
British North America	712, 600	669, 000
Foreign West Indies	1, 111, 600	2, 269, 700
France	790, 900	525, 900
Germany	467, 100	446, 800
Italy	316, 500	267, 000
Spain and Canaries	317, 000	151, 700
United States of America	10, 413, 500	6, 555, 600
United States of Colombia	101, 500	232, 600
Other countries	1, 960, 900	1, 403, 100
Total quantity	17, 855, 400	13, 925, 200
Total value	£529, 107 $2, 574, 899 22	£405, 799 $1, 974, 820 83

Imports of flaxseed, flax, tow, and yarn into the port of Belfast during the weeks named below

Week ending—	Flaxseed.		Flax.	Tow.	Yarn.
1883.	*Hhds. and bbls*	*Bgs. and bbls.*	*Tons.*	*Tons.*	*Bales.*
January 4	652	2,641	372	27	110
11	193	7,781	347	18	[illegible]
18	10	....	278	32	[illegible]
25	1,059	....	394	26	[illegible]
February 1	603	2,450	335	31	[illegible]
8	389	156	421	15	[illegible]
15	485	97	390	45	[illegible]
22	134	89	320	25	[illegible]
March 1	624	120	372	69	[illegible]
8	381	484	382	17	[illegible]
15	410	237	368	31	[illegible]
22	520	....	240	34	[illegible]
29	376	717	278	18½	[illegible]

Exports of flax, tow, yarn, linen, and thread from the port of Belfast during the weeks named below.

Week ending—	Flax.	Tow.	Yarn.	Linen.	Thread.
1883.	*Tons.*	*Tons.*	*Bales.*	*Boxes.*	*Pkgs.*
January 4	172¾	23	345	1,480	[illegible]
11	124½	19	373	2,303	[illegible]
18	84½	10	343	2,456	[illegible]
25	133¾	35	320	2,622	[illegible]
February 1	100½	15½	319	2,437	[illegible]
8	212¼	14	348	2,520	[illegible]
15	164½	9¾	373	2,592	[illegible]
22	114¾	4	352	2,495	[illegible]
March 1	158¾	10½	364	3,467	[illegible]
8	130	14	388	2,705	[illegible]
15	83½	15	380	2,552	[illegible]
22	151¾	14	428	2,625	[illegible]
29	137¼	14	379	2,305	[illegible]

Importations of flaxseed into Belfast, Ireland, for the several weeks below named.

Week ending—	Riga.	Dutch.	English.
1883.	*Bbls. and bags*	*Hds. and bbls.*	*Sacks.*
January 6	....	602	....
13	....	193	....
20	....	....	....
27	....	1,024	....
February 3	2,450	603	....
10	156	389	....
17	....	485	97
24	89	134	....
March 3	120	624	....
10	484	381	....
17	237	410	....
24	....	520	....
31	350	743	....

***Importations of flax, tow, and codilla into the United Kingdom for the month ended December* 31, 1882, *and in the year ended December* 31, 1882, *compared with corresponding periods of the years* 1880 *and* 1881.**

Country.	Month ended December 31.					
	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
Flax dressed, undressed, and tow, or codilla of flax, from—	*Cwts.*	*Cwts.*	*Cwts.*			
Russia	57, 558	51, 222	37, 582	£107, 514	£94, 344	£54, 985
Germany	1, 827	2, 467	2, 803	3, 099	4, 608	4, 700
Holland	8, 562	17, 809	12, 489	29, 913	43, 365	38, 940
Belgium	18, 710	34, 256	22, 754	67, 344	116, 800	85, 598
Other countries	930	3, 953	9, 770	1, 740	8, 083	18, 762
Total	87, 587	109, 709	85, 398	209, 610 $1, 020, 067 06	267, 200 $1, 300, 328 80	202, 985 $987, 826 50

Country.	Year ended December 31.					
	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
Flax dressed, undressed, and tow, or codilla of flax, from—	*Cwts.*	*Cwts.*	*Cwts.*			
Russia	**1, 447, 374**	**1, 362, 999**	**1, 488, 110**	**£2, 823, 147**	**£2, 212, 229**	**£2, 225, 671**
Germany	**88, 470**	**64, 130**	**65, 007**	**156, 044**	**108, 319**	**100, 366**
Holland	**82, 103**	**101, 897**	**118, 768**	**261, 581**	**294, 708**	**328, 027**
Belgium	**242, 084**	**226, 317**	**233, 702**	**736, 997**	**732, 512**	**852, 827**
Other countries	**36, 218**	**26, 419**	**61, 382**	**91, 780**	**50, 504**	**101, 325**
Total	**1, 896, 249**	**1, 781, 762**	**1, 966, 969**	**4, 069, 549 $19, 804, 460 21**	**3, 398, 272 $16, 537, 690 68**	**3, 608, 216 $17, 550, 383 16**

***Importations of flax, tow, and codilla into the United Kingdom for the month ended January* 31, 1883, *compared with the corresponding periods of the years* 1881 *and* 1882.**

ountry.	Month ended January 31.					
	Quantities.			Value of imports.		
	1881.	1882.	1883.	1881.	1882.	1883.
Flax dressed, undressed, and tow, or codilla of flax, from —	*Cwts.*	*Cwts.*	*Cwts.*			
Russia	**13, 373**	**59, 150**	**4, 652**	**£23, 548**	**£95, 710**	**£8, 165**
Germany	**2, 664**	**8, 897**	**2, 612**	**5, 274**	**16, 079**	**4, 861**
Holland	**8, 193**	**12, 684**	**8, 064**	**28, 801**	**41, 089**	**23, 861**
Belgium	**16, 140**	**29, 177**	**31, 760**	**54, 266**	**111, 184**	**109, 392**
Other countries	**1, 235**	**4, 308**	**6, 390**	**3, 215**	**10, 356**	**11, 583**
Total	**41, 605**	**114, 216**	**53, 478**	**115, 104 $560, 153 62**	**274, 418 $1, 335, 455 20**	**157, 862 $768, 235 42**

Importations of flax, tow, and codilla into the United Kingdom for the month ended February 28, 1883, and in the two months ended February 28, 1883, as compared with the corresponding periods of the years 1881 and 1882.

Country.	Month ended February 28.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Flax dressed, undressed, and tow, or codilla of flax, from—	*Cwts.*	*Cwts.*	*Cwts.*			
Russia	....	1, 488	3, 725	....	£1, 693	£4, 568
Germany	248	7, 652	10, 780	£295	9, 074	12, 550
Holland	22, 192	18, 152	17, 122	40, 557	33, 453	30, 438
Belgium	34, 206	22, 407	16, 400	56, 468	48, 717	38, 300
Other countries	4, 136	8, 521	34, 409	5, 779	10, 987	60, 584
Total	60, 782	58, 220	82, 436	103, 099 $501, 731 28	103, 924 $505, 746 15	146, 440 $712, 650 26

Country.	Two months ended February 28.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Flax dressed, undressed, and tow, or codilla of flax, from—	*Cwts.*	*Cwts.*	*Cwts.*			
Russia	3, 323	17, 415	5, 616	£3, 819	£21, 525	£7, 055
Germany	14, 576	26, 761	17, 647	18, 302	33, 264	20, 506
Holland	40, 267	42, 630	29, 346	72, 764	77, 684	51, 176
Belgium	66, 292	61, 759	16, 400	106, 261	137, 234	38, 300
Other countries	5, 412	13, 510	45, 030	7, 231	17, 808	76, 404
Total	129, 870	162, 075	114, 039	208, 377 $1, 014, 066 68	287, 515 $1, 399, 191 55	193, 441 $941, 380 63

Exports of linen yarns from the United Kingdom for the month ended December 31, 1882, *and in the year ended December* 31, 1882, *compared with the corresponding periods of the years* 1880 *and* 1881.

Country.	Month ended December 31.					
	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
Linen yarns to—	*Pounds.*	*Pounds.*	*Pounds.*			
Germany	201, 200	229, 600	149, 900	£17, 300	£18. 801	£13, 587
Holland	167, 200	245, 200	164, 700	7, 957	10, 720	6, 364
Belgium	130, 000	96, 800	93, 500	11, 046	9, 171	6, 769
France	95, 500	147, 500	123, 600	12, 008	17, 438	13, 924
Spain and Canaries	616, 100	555, 000	417, 300	26, 824	23, 284	17, 288
Italy	89, 600	108, 600	33, 800	5, 431	5, 644	1, 760
Other countries	98, 500	368, 000	129, 600	5, 633	13, 426	5, 826
Total	1, 398, 100	1, 750, 700	1, 112, 400	86, 199 $419, 487 44	98, 484 $479, 272 39	66, 018 $321, 276 60

Country.	Year ended December 31.					
	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
Linen yarns to—	*Pounds.*	*Pounds.*	*Pounds.*			
Germany	2, 130, 600	2, 476, 500	2, 212, 500	£203, 001	£209, 163	£194, 438
Holland	2, 520, 300	2, 438, 100	2, 592, 000	120, 215	102, 365	105, 285
Belgium	1, 140, 000	1, 629, 900	1, 620, 100	107, 394	125, 829	136, 472
France	947, 100	1, 527, 100	1, 724, 400	122, 167	182, 164	197, 301
Spain and Canaries	6, 839, 200	6, 552, 600	7, 069, 200	291, 431	280, 189	279, 985
Italy	823, 900	936, 600	468, 400	45, 776	51, 904	23, 801
Other countries	2, 076, 400	2, 689, 400	2, 472, 200	88, 334	106, 185	100, 256
Total	16, 477, 500	18, 250, 200	18, 158, 800	978, 318 $4, 760, 984 55	1, 057, 799 $5, 147, 778 84	1, 037, 538 $5, 049, 178 68

Exports of linen yarns from the United Kingdom for the month ended January 31, 1883, *compared with the corresponding periods of the years* 1881 *and* 1882.

Country.	Month ended January 31.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Linen yarns to—	*Pounds.*	*Pounds.*	*Pounds.*			
Germany	170, 500	143, 900	136, 700	£14, 970	£14, 122	£11, 394
Holland	166, 400	212,700	170, 100	7, 166	9, 057	7, 179
Belgium	66, 500	123, 700	165, 900	4, 503	11, 130	12, 497
France	63, 900	143, 600	156, 000	7, 954	17, 497	17, 295
Spain and Canaries	561, 300	680, 100	650, 900	23, 988	27, 074	26, 023
Italy	89, 600	107, 200	43, 100	5, 038	5, 765	2, 387
Other countries	142, 200	375, 000	157, 800	5, 379	12, 667	6, 458
Total	1, 260, 400	1, 786, 200	1, 480, 500	68, 998 $335, 778 77	97, 312 $473, 568 85	83, 233 $405, 053. 40

Exports of linen yarns from the United Kingdom for the month ended February 28, 1883, *and in the two months ended February* 28, 1883, *compared with the corresponding periods of the years* 1881 *and* 1882.

Country.	Month ended February 28.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Linen yarns to—	*Pounds.*	*Pounds.*	*Pounds.*			
Germany	187, 000	207, 400	139, 400	£16, 518	£18, 181	£12, 663
Holland	107, 800	143, 200	213, 200	4, 533	5, 702	8, 582
Belgium	172, 300	155, 500	158, 100	13, 703	11, 638	12, 061
France	152, 400	158, 100	125, 500	15, 703	17, 962	12, 765
Spain and Canaries	458, 000	661, 000	452, 700	18, 972	24, 577	20, 172
Italy	66, 500	69, 600	26, 600	3, 844	3, 540	1, 176
Other countries	179, 300	279, 400	105, 300	6, 143	9, 589	7, 378
Total	1, 323, 300	1, 674, 200	1, 310, 800	79, 416 $386, 477 97	91, 189 $443, 771 27	76, 947 $3, 774 62

Country.	Two months ending February 28.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Linen yarns to—	*Pounds.*	*Pounds.*	*Pounds.*			
Germany	357, 500	351, 300	276, 100	£31, 488	£32, 303	£24, 037
Holland	274, 200	355, 900	383, 300	11, 699	14, 759	16, 011
Belgium	238, 800	279, 200	324, 000	18, 206	22, 768	25, 538
France	216, 300	301, 700	281, 500	23, 657	35, 459	31, 000
Spain and Canaries	1, 019, 300	1, 341, 100	1, 103, 600	42, 960	51, 651	46, 195
Italy	156, 100	176, 800	69, 700	8, 882	9, 305	3, 563
Other countries	321, 500	654, 400	353, 100	11, 522	22, 256	13, 836
Total	2, 583, 700	3, 460, 400	2, 791, 300	148, 414 $722, 256 73	188, 501 $917, 340 12	160, 180 $779, 515 97

Exports of linen from the United Kingdom for the month ended December 31 *and in the year ended December* 31, 1882, *compared with the corresponding periods of the years* 1880 *and* 1881.

Country.	Month ended December 31.					
	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
Linens to—	*Yards.*	*Yards.*	*Yards.*			
Russia	201, 600	159, 800	7, 500	£9, 435	£7, 620	£467
Germany	367, 600	498, 600	336, 900	16, 250	21, 548	14, 113
Holland	15, 200	52, 900	22, 300	698	2, 295	1, 277
France	302, 900	313, 300	385, 000	11, 363	18, 085	15, 416
Portugal, Azores, and Madeira	125, 600	129, 300	58, 400	2, 677	2, 528	1, 607
Spain and Canaries	161, 800	184, 700	172, 400	6, 995	7, 601	7, 735
Italy	209, 200	191, 000	102, 500	7, 986	7, 495	5, 029
United States	6, 243, 700	6, 090, 500	5, 649, 400	172, 331	163, 233	176, 341
Foreign West India Islands	1, 245, 400	1, 511, 900	1, 187, 300	31, 098	35, 951	26, 343
United States of Colombia (New Granada)	494, 600	163, 900	246, 200	10, 892	3, 647	4, 670
Brazil	244, 300	399, 400	250, 200	9, 046	13, 100	8, 021
Argentine Republic	70, 300	108, 300	111, 000	2, 011	3, 267	3, 305
Chili	27, 200	37, 600	69, 700	1, 301	1, 379	2, 671
Peru	4, 500	42, 600	7, 300	231	1, 190	214

Exports of linen from the United Kingdom for the month ended December 31, *&c.*—Cont'd.

Country.	Month ended December 31.					
	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
Linen to—	*Yards.*	*Yards.*	*Yards.*			
British North America	104, 700	72, 800	250, 100	£3, 605	£2, 615	£6, 921
British West India Islands and Guiana	167, 400	188, 900	196, 100	4, 557	3, 988	3, 929
British India	210, 100	237, 300	171, 900	8, 745	6, 410	5, 096
Australia	1, 265, 500	2, 156, 500	1, 690, 800	38, 064	61, 118	50, 937
Other countries	840, 200	1, 515, 400	1, 118, 400	27, 824	44, 571	34, 497
Total of plain, bleached, or unbleached	11, 600, 500	13, 201, 900	11, 306, 200	338, 823	375, 408	341, 579
Total of checked, printed, or dyed damasks or diapers	445, 400	542, 300	529, 200	12, 101	16, 637	16, 998
Sail cloth and sails	255, 900	309, 600	198, 000	14, 185	15, 601	10, 011
Total of piece goods	12, 301, 800	14, 053, 800	12, 033, 400	366, 109	407, 646	368, 588
Thread for sewing, pounds	193, 700	219, 200	230, 200	£22, 657	£28, 482	£32, 426
Unenumerated	....	....	....	28, 201	39, 176	26, 358
Total value of linen manufactures.	....	....	....	415, 967 $2, 024, 303 41	475, 304 $2, 313, 066 92	427, 372 $2, 079, 805 84

Country.	Year ending December 31.					
	Quantities.			Declared value.		
	1880.	1881.	1882.	1880.	1881.	1882.
Linens to—	*Yards.*	*Yards.*	*Yards.*			
Russia	1, 106, 400	871, 600	1, 195, 900	£60, 231	£41, 447	£56, 998
Germany	4, 726, 600	5, 473, 100	5, 400, 800	201, 198	239, 082	231, 652
Holland	298, 600	395, 300	337, 000	12, 575	16, 741	15, 929
France	3, 437, 600	3, 340, 300	5, 003, 100	167, 263	175, 473	221, 397
Portugal, Azores, and Madeira	1, 533, 200	1, 224, 200	1, 088, 600	36, 465	29, 957	28, 321
Spain and Canaries	2, 603, 800	2, 639, 400	2, 406, 000	110, 687	110, 292	105, 942
Italy	2, 163, 700	2, 842, 900	1, 917, 700	87, 478	112, 248	81, 071
United States	90, 647, 000	82, 147, 000	90, 551, 300	2, 735, 102	2, 346, 075	2, 529, 720
Foreign West India Islands	12, 771, 300	23, 207, 200	15, 060, 100	337, 264	538, 593	355, 213
United States of Colombia (New Granada)	2, 822, 000	3, 251, 100	2, 257, 900	62, 362	73, 965	48, 138
Brazil	3, 639, 600	3, 802, 200	3, 450, 900	131, 178	139, 673	117, 693
Argentine Republic	1, 107, 600	1, 614, 300	1, 622, 900	41, 747	57, 587	53, 624
Chili	1, 082, 600	976, 500	994, 000	32, 895	31, 636	32, 902
Peru	130, 300	378, 600	360, 300	4, 798	10, 621	10, 641
British North America	7, 825, 700	6, 466, 000	6, 039, 600	193, 412	161, 662	161, 473
British West India Islands and Guiana	2, 654, 400	2, 328, 400	3, 024, 500	67, 106	52, 747	65, 967
British India	2, 333, 300	2, 526, 900	2, 541, 700	85, 437	85, 703	97, 404
Australia	10, 869, 200	13, 905, 000	17, 079, 500	345, 756	424, 901	489, 542
Other countries	13, 213, 700	16, 621, 400	15, 910, 100	422, 546	516, 810	478, 320
Total of plain, bleached, or unbleached	156, 689, 600	165, 217, 600	165, 692, 500	4, 818, 841	4, 838, 664	4, 760, 277
Total of checked, printed, or dyed damasks or diapers	4, 987, 600	5, 487, 100	6, 955, 500	150, 182	161, 023	235, 849
Sail cloth and sails	3, 289, 400	3, 306, 700	3, 593, 900	166, 477	165, 526	185, 821
Total of piece goods	164, 966, 600	174, 011, 400	176, 241, 900	5, 135, 500	5, 165, 213	5, 181, 947
Thread for sewing, pounds	2, 878, 400	2, 590, 200	2, 795, 600	£372, 078	£330, 422	£373, 005
Unenumerated	....	....	....	328, 441	350, 726	412, 467
Total value of linen manufactures.	....	....	....	5, 836, 019 $28, 400, 986 46	5, 846, 361 $28, 451, 315 81	5, 967, 419 $29, 040, 444 57

Exports of linen from the United Kingdom for the month ended January 31, 1883, *compared with the corresponding periods of the years* 1881 *and* 1882.

Country.	Month ended January 31.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Linen manufactures to—	*Yards.*	*Yards.*	*Yards.*			
Russia	45, 100	43, 200	7, 700	£2, 095	£2, 346	£580
Germany	391, 100	367, 200	283, 600	16, 882	16, 833	12, 871
Holland	17, 500	27, 200	17, 100	760	1, 332	602
France	309, 700	299, 400	369, 400	16, 098	13, 199	15, 682
Portugal, Azores, and Madeira	105, 200	121, 400	60, 400	2, 163	2, 891	2, 141
Spain and Canaries	231, 300	220, 300	211, 200	8, 972	9, 123	8, 306
Italy	235, 400	171, 200	171, 900	9, 761	6, 429	8, 016
United States	10, 200, 500	12, 146, 700	10, 593, 200	299, 909	335, 200	289, 288
Foreign West India Islands	1, 926, 300	946, 800	1, 591, 800	42, 125	24, 066	35, 880
United States of Colombia (New Granada)	173, 000	147, 000	290, 900	3, 849	3, 411	5, 676
Brazil	277, 500	442, 400	172, 800	11, 547	12, 271	6, 900
Argentine Republic	112, 800	112, 400	131, 600	4, 831	3, 913	4, 789
Chili	125, 800	123, 900	49, 600	3, 915	3, 374	2, 081
Peru	3, 700	13, 400	9, 500	140	511	218
British North America	772, 600	652, 700	857, 200	18, 432	16, 494	24, 566
British West India Islands and Guiana	224, 400	249, 400	241, 700	4, 784	5, 454	5, 375
British India	344, 800	193, 300	352, 500	10, 710	8, 055	11, 556
Australia	907, 700	1, 406, 900	1, 189, 200	28, 288	40, 977	34, 173
Other countries	1, 154, 800	1, 063, 600	1, 051, 400	34, 556	31, 656	32, 076
Total of plain unbleached or bleached	16, 952, 900	17, 981, 200	16, 843, 900	497, 996	507, 790	467, 992
Total of checked, printed, or dyed, and damasks or diapers	346, 800	489, 900	531, 300	9, 196	16, 174	18, 902
Sail cloth and sails	259, 500	277, 300	277, 500	12, 625	13, 571	13, 903
Total of piece goods	17, 559, 200	18, 748, 400	17, 652, 700	519, 817	537, 535	500, 797
Thread for sewing ... pounds	198, 500	321, 700	224, 900	20, 049	36, 344	30, 840
Unenumerated	....	....	....	22, 893	38, 843	30, 179
Total of linen manufactures	....	....	....	568, 759 $1, 767, 865. 67	612, 722 $2, 981, 811. 61	561, 816 $2, 734, 077. 56

Exports of linens from the United Kingdom for the month ended February 28, 1883, *and in the two months ended February* 28, 1883, *compared with the corresponding periods of the years* 1881 *and* 1882.

Country.	Month ended February 28.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Linen manufactures to—	*Yards.*	*Yards.*	*Yards.*			
Russia	6, 200	42, 000	6, 100	£299	£1, 705	£385
Germany	358, 900	315, 800	307, 800	16, 251	13, 778	12, 956
Holland	27, 900	20, 500	14, 200	1, 085	1, 173	620
France	355, 200	427, 600	466, 100	17, 980	20, 677	20, 888
Portugal, Azores, and Madeira	104, 500	139, 900	64, 800	2, 504	2, 845	1, 421
Spain and Canaries	210, 200	193, 700	210, 100	8, 512	8, 384	8, 963
Italy	308, 000	128, 300	160, 800	12, 126	4, 495	6, 962
United States	8, 882, 600	9, 965, 300	9, 946, 000	258, 084	252, 674	290, 891
Foreign West India Islands	2, 178, 200	1, 047, 200	1, 193, 800	49, 914	26, 213	29, 159
United States of Colombia (New Granada)	447, 000	127, 500	150, 300	10, 818	3, 109	3, 011
Brazil	224, 000	345, 800	235, 500	7, 700	11, 540	6, 955
Argentine Republic	124, 700	111, 500	144, 200	4, 603	3, 367	5, 435
Chili	35, 000	40, 200	56, 800	1, 066	1, 112	1, 937
Peru	15, 200	68, 100	7, 600	304	1, 592	139
British North America	753, 400	550, 000	636, 900	18, 898	15, 470	20, 149

Exports of linen from the United Kingdom for the month ended February 28, 1883, *and in the two months ended February* 28, 1883, *&c.*—Continued.

Country.	Month ended February 28.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883
Linen manufactures to—						
British West India Islands and Guiana...	*Yards.* 116, 800	*Yards.* 393, 300	*Yards.* 244, 000	£3, 241	£7, 926	£5, 130
British India	276, 900	190, 700	244, 200	9, 457	6, 576	7, 367
Australia	692, 500	986, 500	791, 400	25, 272	26, 307	23, 441
Other countries..........	726, 500	1, 349, 300	1, 110, 100	25, 317	39, 518	31, 752
Total of plain bleached or unbleached	15, 232, 500	15, 678, 400	15, 281, 100	450, 682	417, 885	448, 722
Total of checked, printed, or dyed, damasks or diapers	453, 500	493, 000	542, 300	14, 028	16, 362	19, 846
Sail cloth and sails......	157, 700	271, 800	167, 300	8, 721	14, 214	8, 993
Total of piece goods.	15, 843, 700	16, 443, 200	15, 990, 700	473, 431	448, 461	477, 561
Thread for sewing..lbs..	171, 600	204, 000	175, 200	23, 137	29, 223	22, 535
Unenumerated.........	....	....	....	21, 195	40, 216	26, 717
Total value of linen manufactures...	....	....	....	517, 763 $2, 519, 693. 64	517, 900 $2, 520, 360. 35	526, 813 $2, 563, 730. 60

Country.	Two months ended February 28.					
	Quantities.			Declared value.		
	1881.	1882.	1883.	1881.	1882.	1883.
Linen manufactures to—	*Yards.*	*Yards.*	*Yards.*			
Russia..................	51, 300	85, 200	13, 800	£2, 394	£4, 051	£965
Germany	750, 000	683, 000	591, 400	33, 133	30, 611	25, 827
Holland.................	45, 400	47, 700	31, 300	1, 845	2, 505	1, 222
France	664, 900	727, 000	835, 500	34, 078	33, 876	36, 570
Portugal, Azores, and Madeira	209, 700	261, 300	125, 200	4, 667	5, 736	3, 583
Spain and Canaries....	441, 500	414, 000	421, 300	17, 484	17, 507	17, 269
Italy....................	543, 400	299, 500	332, 700	21, 887	10, 924	14, 978
United States...........	19, 083, 100	22, 112, 000	20, 539, 200	557, 993	587, 874	580, 179
Foreign West India Islands	4, 104, 500	1, 994, 000	2, 785, 600	92, 039	50, 279	65, 039
United States of Colombia (New Granada)....	620, 000	274, 500	441, 200	14, 667	6, 520	8, 687
Brazil....................	501, 500	788, 200	408, 300	19, 247	23, 811	13, 855
Argentine Republic	237, 500	223, 900	275, 800	9, 434	7, 280	10, 224
Chili.....................	160, 800	164, 100	106, 400	4, 981	4, 486	4, 018
Peru	18, 900	81, 500	17, 100	444	2, 103	357
British North America..	1, 526, 000	1, 202, 700	1, 494, 100	37, 330	31, 964	44, 715
British West India Islands and Guiana...	341, 200	642, 700	485, 700	8, 025	13, 380	10, 505
British India............	621, 700	384, 000	596, 700	20, 167	14, 631	18, 923
Australia	1, 600, 200	2, 393, 400	1, 980, 600	53, 560	67, 284	57, 614
Other countries.........	1, 881, 300	2, 412, 900	2, 161, 500	59, 873	71, 174	63, 828
Total of plain bleached or unbleached	32, 185, 400	33, 659, 600	32, 125, 000	948, 678	925, 675	916, 714
Total of checked, printed, or dyed, damasks or diapers	800, 300	982, 900	1, 073, 600	23, 224	32, 536	38, 748
Sail cloth and sails......	417, 200	549, 100	444, 800	21, 346	27, 785	22, 896
Total of piece goods.	33, 402, 200	35, 191, 600	33, 643, 400	993, 248	985, 996	978, 358
Thread for sewing..lbs..	370, 100	525, 700	400, 100	49, 186	65, 567	53, 375
Unenumerated.........	....	....	....	44, 088	79, 059	56, 896
Total value of linen manufactures...	....	....	....	1, 086, 522 $5, 287, 559. 31	1, 130, 622 $5, 502, 171. 96	1, 088, 629 $5, 297, 813. 03

A. B. WOOD, *Consul.*

UNITED STATES CONSULATE,
Belfast, April 18, 1883.

INDUSTRIAL AND LABOR STATISTICS OF RUSSIA.

REPORT BY CONSUL-GENERAL STANTON, OF ST. PETERSBURG.

INDUSTRIAL PROGRESS OF MOSCOW.

The Novosti devotes an article, of which the following is a brief extract, to the great progress made by the industries of the government of Moscow:

According to the latest reports, there are 1,311 manufactories in this government. They furnish employment to 212,800 laborers, and their annual production is valued at 554,458,179 roubles ($127,229,089).

A quarter of a century ago the value of the manufactures of the entire empire did not exceed 241,509,306 roubles ($120,754,653), and this fact best exhibits the progress of Moscow's industry. Of these 1,311 manufactories 676 are situated in the old Russian capital itself, and their annual production is valued at 126,356,000 roubles ($63,178,000).

Steam is the motive power most in use, there being in the city 96 engines of Russian and 715 of foreign make, representing a total of 13,403 horse-power. The fuel most employed is wood, then coal and turf, and the following are quantities consumed, with the value thereof:

Description.	Quantity.	Value.
Firewood	656,568 sageens	$2,[illegible]
Russian coal	6,502,687 poods, 117,048 tons	401,[illegible]
Foreign coal	3,412,014 poods, 61,416 tons	
Charcoal	178,569 poods, 3,214 tons	74,[illegible]
Peat	133,812 poods, 2,409 tons	406,[illegible]
Other combustibles	101,378 poods, 1,825 tons	128,182
Total		3,712,[illegible]

From these figures it will be seen that wood predominates as an article of fuel, and the rapid destruction of the forests leads to the belief that the supply will soon be exhausted. It is time that wood should be replaced by coal or the interior of the empire will soon be woodless. The sugar industry has already produced this effect in Southern Russia.

Besides steam, there are many hydraulic motors in Moscow, and horses are also employed. Of the former, 230 machines, with 2,900 horse-power, are in use, whilst 108 machines are moved by horses.

The distribution of the 212,800 laborers is as follows:

Laborers.	Male.	Female.
I.—LODGING IN THE WORKS.		
Adults	81,315	28,412
Children under 12 years	3,538	1,605
Youth from 12 to 18	13,571	5,788
II.—LODGING WITHOUT THE WORKS.		
Adults	26,554	11,755
Children under 12 years	910	1,635
Youth from 12 to 18 years	4,754	3,626
III.—OUTSIDE WORKERS.		
Adults	13,504	12,107
Children under 12 years	1,213	1,063
Youth from 12 to 18 years	589	809

It is noticeable that the majority of the laborers are lodged in the factories, and what is especially worthy of remark is the great number of children employed under 12 years of age, viz, 9,964, or 5,661 boys and 4,303 girls. This is a characteristic feature of the entire Russian industry, and may doubtless be attributed to the addiction of the adults to drink, which renders them even less trustworthy than half-grown children.

LABOR STATISTICS OF RUSSIA.

Russia has a law governing this matter, but it is not yet in full force. It prohibits the employment in factories of children under ten years, and restricts that of youth from twelve to eighteen years to eight hours daily labor.

Sixty thousand children, between the ages of twelve and fifteen, are employed in Russia, at a daily average wage of 30 copecks (15 cents). These children earn in a year of 280 days 5,000,000 roubles ($2,500,000), and it is stated that the law governing their employment is to be gradually enforced to prevent the loss and suffering consequent on the sudden withdrawal of so many laborers from the manufactures and so much money from the laborers.

For the better inspection and instruction of these youthful laborers, it is proposed to divide the empire into nine districts. Each district will be under the supervision of an inspector, who will be assisted by several deputies. There will also be an inspector-general, to whom all inspectors are subordinate. The number of the factories and laborers in these districts are given in the following table, viz:

Governments.	Factories.	Laborers.
I.—ST. PETERSBURG DISTRICT.		
St. Petersburg	803	80,735
Novgorod	205	4,634
Pskoff	386	2,357
Esthonia	19	6,461
Livonia	270	14,067
Total	1,683	108,254
II.—MOSCOW DISTRICT.		
Moscow	1,527	162,701
Tver	454	20,538
Smolensk	265	5,199
Kalooga	705	16,476
Toola	302	7,442
Riasan	450	10,095
Total	3,703	222,442
III.—VLADIMIR DISTRICT.		
Vladimir	460	87,976
Nischni Novgorod	399	7,545
Kostroma	900	30,492
Total	1,759	126,013
IV.—HARKOFF DISTRICT.		
Harkoff	430	8,303
Tekaterinoslaff	331	6,267
Tshernigoff	431	6,319
Poltava	258	3,077
Don district	405	2,290
Total	1,855	26,256
V.—KIEF DISTRICT.		
Kief	327	9,743
Volhynia	561	3,865
Podolia	371	4,189
Kerson	323	7,019
Total	1,582	24,7

Governments.	Factories.	Laborers.
VI.—VILNA DISTRICT.		
Vilna	92	1,083
Koona	160	810
Grodno	479	7,751
Minsk	246	1,643
Mohileff	174	1,393
Vitebsk	545	1,766
Total	1,796	14,446

In the three remaining districts, Warsaw, Kazan, and Voronesh, there are 15,000 factories with about 100,000 laborers. In the fifty-two governments thus divided into districts, there are 27,110 factories and 719,139 laborers.

EDGAR STANTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, May 4, 1883.

INDUSTRIAL STATISTICS OF BAVARIA.

REPORT BY CONSUL HARPER, OF MUNICH.

I.—PRINCIPAL VOCATIONS.

The total population of Bavaria, according to the counting of the principal vocations, consists of 5,261,592, of which 2,719,965, or 51.7 per cent., are adults of independent occupations, 94,854, or 1.8 per cent., domestic servants, and 2,445,773, or 46.5 per cent., are minors.

The active earning population is distributed among the principal vocations as follows:

Vocation.	Persons.	Per cent.
A, I. Agriculture, breeding of animals, and gardening	1,492,634	54.9
A, II. Forest culture, hunting, and fishing	12,925	0.4
B. Mining, smelting, mechanics, and architecture	620,798	[illegible]
C. Commerce and trade	171,868	[illegible]
D. Hired persons of various kinds	22,590	[illegible]
E. Government, municipal, and military service, and professions	121,890	[illegible]
F. Pensioners, rentiers, inmates of institutes, those who are in preparation for vocations, and minors who are learning vocations	268,262	9.9

The principals who are acting in agricultural or in technical management of any kind are added to the group to which those managements belong; as, for instance, forestry officers to A, II; building, mining, smelting officers, and art, to B; post, railroad, telegraph, and naval officers, hotels, public houses, inns, and restaurants to C; music, theaters, and various entertainments to E.

In the several Government districts the total number of active, self-supporting persons are—

Districts.	A. Agriculture and forestery.	B. Industry.	C. Commerce and trade.	D, E, F. Other kinds.
Upper Bavaria	254, 446	129, 166	45, 699	101, 525
Lower Bavaria	236, 434	56, 121	16, 908	48, 518
Palatinate	170, 258	89, 673	19, 304	36, 906
Upper Palatinate	170, 033	48, 809	12, 642	38, 811
Upper Franconia	142, 509	74, 778	14, 557	39, 752
Middle Pranconia	158, 827	94, 076	24, 872	51, 319
Lower Franconia	180, 400	58, 413	17, 725	43, 247
Suabia	192, 652	78, 760	20, 161	52, 663

The percentage of the total number of self-supporting persons is as as follows:

Districts.	A. Agriculture and forestry.	B. Industry.	C. Commerce and trade.	D, E. Other kinds.
	Pr. ct.	*Pr. ct.*	*Pr. ct.*	*Pr. ct.*
Upper Bavaria	48. 0	24. 3	8. 6	19. 1
Lower Bavaria	66. 0	15. 7	4. 7	13. 6
Palatinate	53. 8	28. 4	6. 1	11. 7
Upper Palatinate	62. 9	18. 1	4. 7	14. 3
Upper Franconia	52. 5	27. 5	5. 4	14. 6
Middle Franconia	48. 3	28. 6	7. 5	15. 6
Lower Franconia	60. 2	19. 5	5. 9	14. 4
Suabia	56. 0	22. 9	5. 9	15. 2
Kingdom	55. 3	23. 2	6. 3	15. 2

We see from this that more than half of all the self-supporting persons are agriculturists, while one-fourth belong to industry, one-sixteenth to commerce and trade, and only one-seventh to all other vocations.

According to this table the greatest number of agriculturists belong to Lower Bavaria; then follow Upper Palatinate and Lower Franconia, whilst the smallest number belong to Middle Franconia and Upper Bavaria. Of the industrial branches Middle Franconia and the Palatinate head the list, and we find the smallest number of self-supporting persons in Upper Palatinate and Lower Bavaria. Of those engaged in trade and commerce we find the greatest number of persons in Upper Bavaria and Middle Franconia; the smallest number in Upper Palatine and Lower Bavaria.

Self-supporting persons are again divided into—

(*a*) Subordinates and principals.

(*b*) Superintendents and counting-office persons.

(*c*) Other assistants and workmen; to which are to be added the day-laborers, with their respective families and domestics.

This division relates principally to—

A. Agricultural and forest employment.

B. Industry.

C. Trade and commerce.

And we find the following numbers in the three different classes:

Classes.	Independents.	Principals.	Assistants.
A. Agriculture, &c	458,142	2,738	1,044,679
B. Industry, &c	253,192	7,066	369,538
C. Commerce and trade	77,304	11,946	82,618
Total	788,638	21,750	1,496,835

PERCENTAGE.

Classes.	Independents.	Principals.	Assistants.
A. Agriculture, &c	30.4	0.2	69.4
B. Industry, &c	40.2	1.1	58.7
C. Commerce and trade	45.0	7.0	48.0
Average	34.2	0.9	64.9

In agriculture and forestry the percentage per 100 persons is somewhat over 30 independent persons and nearly 70 assistants and workingmen; in industry, 40 independent and 60 assistants, and in commerce and trade, 45 independents and 55 assistants and workmen.

In adding the various members of the family and the domestics to those who are self-supporting we find the number belonging to each principal vocation to be as follows:

Vocation.	Active earning men and independents.	Servants.	Members of families.	Total.	Per cent.
A, I. Agriculture, breeding of cattle, and gardening	1,492,634	8,028	1,141,588	2,642,250	50.2
A, II. Forestry, hunting, and fishing	12,925	1,145	23,183	37,253	0.7
B. Mining and smelting, mechanics, and architecture	629,796	29,890	829,422	1,489,108	28.3
C. Commerce and trade	171,868	22,895	239,597	534,360	8.2
D. Hired work and employments of various kinds	22,590	105	16,211	38,906	0.8
E. Government, community, and military service, and professions	121,890	19,799	101,409	243,098	4.6
F. Pensioners, rentiers, inmates of institutions, those who are in preparation for vocations, and minors who are learning vocations	268,262	13,992	94,363	376,617	7.2
Total	2,719,965	95,854	2,445,773	5,261,593	

Of 1,000 persons of the population of Bavaria there are 502 persons, or one-half of all the inhabitants, belonging to agriculture; 283 persons, or nearly three-tenths, to industry; 82 persons, or one-thirteenth, to commerce and trade; 46 persons, or about one-twentieth, to government, community, and military service and professions; 7 persons to forestry, hunting, and fishing; 8 hired persons of various kinds; about 72 persons, or one-fourteenth, to pensioners and minors who are learning vocations, &c.

From the foregoing table of active earning men and servants and family members we see further that of 100 persons there are the following proportions in the various industries:

Vocation.	Active earning men and independents.	Non-active earning persons, or only incidental earning persons.
A, I. Agriculture, breeding of cattle, and gardening	56	44
A, II. Forestry, hunting, and fishing	35	65
B. Mining and smelting, mechanics, and architects	42	58
C. Commerce and trade	40	60
D. Hired work and employments of various kinds	58	42
E. Government, community, and military service and professions	50	50
F. Pensioners, rentiers, inmates of institutions, those who are in preparation for vocations, and minors who are learning vocations	71	29
Total average	52	48

In other words, we may classify the active earning men as the supporters, and the servants, children, and others none, or only incidental active earners as supported; and from this it appears that in the total population of Bavaria the average proportion is 52 supporters to 48 supported persons, viz, one half of the population supports itself and also supports the other half. In agriculture there are 5 supporters to 4 supported persons, while in the industrial branches as well as in commerce and trade there are 4 supporters to 6 supported persons.

The proportion of the population in agriculture, industry, commerce and trade in the different Government districts is shown in the following table:

Districts.	Agriculture.	Industry.	Commerce and trade.	Other employments.
Upper Bavaria	427, 268	271, 894	99, 046	160, 170
Lower Bavaria	400, 232	126, 085	37, 035	73, 228
Palatinate	313, 371	236, 411	58, 517	64, 107
Upper Palatinate	303, 992	127, 160	33, 652	61, 797
Upper Franconia	270, 028	196, 174	41, 335	61, 565
Middle Franconia	278, 138	217, 009	66, 627	84, 624
Lower Franconia	346, 643	148, 721	50, 438	71, 344
Suabia	339, 831	166, 134	47, 710	81, 786
Kingdom	2, 679, 503	1, 489, 108	434, 360	658, 621

PERCENTAGES.

Upper Bavaria	44. 6	28. 3	10. 4	16. 7
Lower Bavaria	62. 9	19. 8	5. 8	11. 5
Palatinate	46. 6	35. 2	8. 7	9. 5
Upper Palatinate	57. 7	24. 2	6. 4	11. 7
Upper Franconia	47. 4	34. 5	7. 3	10. 8
Middle Franconia	43. 0	33. 6	10. 3	13. 1
Lower Franconia	56. 2	24. 1	8. 2	11. 5
Suabia	53. 5	26. 1	7. 6	12. 8
Kingdom	50. 9	28. 3	8. 2	12. 6

These proportions demonstrate that among all Government districts Lower Bavaria has the largest agricultural population; Palatinate, Upper and Middle Franconia the largest industrial, and Upper Bavaria and Middle Franconia the largest of commerce and trade.

II.—INCIDENTAL VOCATIONS.

Out of the 2,719,965 active, self-supporting persons in the principal vocations above mentioned, there are engaged incidentally in other occupations 363,345, or 13 per cent., viz, 215,960 independents and agriculture, 37,185 in some other manner, 76,596 mining, industry, and mechanics, 50,752 commerce and trade, 635 hired persons of various kinds, 14,166 state and municipal service and so-called voluntary occupations.

The active earning persons in agriculture and forestry amount to 95,561 persons, or about 6 per cent.; those in industry to 185,032 persons, or about 29 per cent.; those in commerce and trade, to 42,664 persons, or about 25 per cent.; and active earning persons and independents belonging to the remaining groups, to 40,088, or nearly 10 per cent.

The earning persons in the principal and incidental vocations are as follows:

Agriculture, &c	1,758,704
Industry, &c	706,392
Commerce and trade	222,620
Remaining vocations	427,543
Total	3,115,259

With the following percentage: 56.5 per cent. for agriculture, 22.7 per cent. for industry, 7.2 per cent. for commerce and trade, and 13.6 per cent. for the remaining vocations.

Finally, below is given the number of persons in the principal vocations in Bavaria compared to those of the German Empire:

Vocation.	Bavaria.	Germany.	Bavaria.	Germany.
			Per cent.	*Per cent.*
Agriculture, &c	2,679,503	19,223,246	50.9	42.5
Industry	1,489,108	16,054,299	28.3	35.5
Commerce and trade	434,360	4,529,783	8.2	10.0
Hired work of various kinds	38,906	938,143	0.8	2.1
Government service	243,098	2,223,184	4.6	4.9
Pensioners and minors who are learning vocations	376,617	2,245,252	7.2	5.9
Total	5,261,592	45,213,907	....	....

The figures 5,261,592 and 45,213,907 are the numbers of the complete population as ascertained by the census in Bavaria and in the German Empire.

The above figures for 1882 differ very little from those of 1880.

JOSEPH W. HARPER,
Consul.

UNITED STATES CONSULATE,
Munich, June 15, 1883.

INDUSTRIAL INTERESTS OF PORTUGAL.

REPORT BY CONSUL-GENERAL FRANCIS, OF LISBON.

A committee, appointed by His Majesty's Government in 1881 for that purpose, instituted inquiries respecting the mechanical, manufacturing, and fishing industries of Portugal and the adjacent islands, and the results of its labors appear in three printed volumes, setting forth a variety of facts pertaining to the subject. From a mass of matter wherein analyzation, comparison, and careful estimate were necessary to deduce fairly accurate conclusions in concise and tabulated form, a work involving considerable pains-taking labor, I have caused to be prepared the accompanying table.

The chief industries referred to are named, with the places where located, the capital employed, and estimated value of annual production. In manufactures, woolen goods lead with $1,695,444 annual production; foundries are credited with $775,542; linen goods, $582,320; cotton manufactures, $442,000. Some quite important industries, straw-hat manufactures, of the Azores, for instance, the exportation of which to our country alone amounted to $33,206 in 1880, are not enumerated, only one interest of this kind coming under the observation of the committee, an establishment at Madeira with annual production of $8,316. There are many small manufacturing industries in the kingdom not reported, whose aggregate productions are estimated at fully $2,000,000. Corkwood prepared for export is set down in the tables at $1,061,580 annually. It must exceed double this amount, as upwards of $500,000 value of this article was sent to the United States in 1880. Gold and silver manufactures are reported less than $500,000 annual production. As a matter of fact, this sum doubled would hardly represent the real value. The fishing industry is set down at $4,320,000 annually, which approximates to accuracy. The copper mines represent a capital of $1,704,931.

The aggregate footing of the table is as follows: Capital invested, $12,942,403.12; estimated annual production, $13,910,218.69. For industries not reported, and those only partially reported, there may be added $4,000,000 at least for annual production, increasing the aggregate of the latter to $18,000,000.

Enough is shown in the tabulated matter, however imperfectly rendered, to point out that Portugal has at least made a start in manufacturing industries, of which it may be said there was little in this kingdom twenty-five years ago, and that little bearing for the most part the rude forms of past ages.

JOHN M. FRANCIS,
Consul-General.

CONSULATE-GENERAL OF THE UNITED STATES,
Lisbon, July 27, 1883.

Table showing the mechanical, manufacturing, and fishing industries of Portugal and adjacent islands.

Districts.	Industries.	Capital.	Estimated annual production.
Lisbon	Foundries	$559,440 00	$496,142 76
	Iron furniture	56,160 00	59,400 00
	Tinsmith	3,240 00	2,376 00
	Carriage	1,944 00	1,800 00
	Cement	10,800 00	9,500 00
	Corsets	1,600 00	1,598 00
	Ice, beer, chocolate, soda, sirup, &c	16,308 00	22,680 00
	Umbrellas	1,080 00	3,240 00
	Matches	2,160 00	6,480 00
	Cotton goods	432,000 00	216,000 00
	Boots and shoes	49,874 00	125,409 60
	Wall paper	47,000 00	20,000 00
	Earthenware	102,600 00	76,680 00
	Woolen goods	540,084 00	392,644 00
	Soap	27,000 00	20,000 00
	Tiles and brick	3,240 00	3,000 00
	Combs	2,484 00	1,941 00
	Cork	996,780 00	903,920 00
	Silk	103,680 00	54,000 00
	Pasteboard	1,836 00	3,888 00
	Ribbons	9,720 00	8,100 00
	Soap and tallow candles	35,240 00	40,176 00
	Pyritic copper mines	1,704,931 20	....
	Flour-mills	37,800 00	30,000 00
	Linen goods	744,320 00	582,320 00
	Fig-distilleries	1,296 00	1,512 00
	Dried figs	247,320 00	313,308 00
	Tan-yards	32,400 00	25,920 00
	Cotton dye-houses	594,000 00	669,600 00
	Star candles	216,000 00	....
Thomar	Cotton goods	540,000 00	226,000 00
	Paper	216,000 00	200,000 00
Portugal	Fish	....	4,320,000 00
Oporto	Wood-sawing	42,120 00	40,000 00
	Goldsmiths	486,000 00	400,000 00
	Silversmiths	54,000 00	40,000 00
	Braziers	4,420 00	4,000 00
	Tinsmiths	75,400 00	70,000 00
	Foundries	437,000 00	200,000 00
	Stone-cutters	486,000 00	400,000 00
	Masons	54,000 00	50,000 00
	Plasterers	64,000 00	60,0[illegible] 00
	Painterers	216,000 00	200,000 00
	Cabinet-makers	378,000 00	300,000 00
	Buttons	16,200 00	16,000 00
	Mattresses	8,604 00	10,800 00
	Harness and trunk	37,800 00	43,200 00
	Gilders	4,320 00	4,000 00
	Type-casting	21,600 00	20,000 00
	Lithographies	19,440 00	19,000 00
	Bookbinding	12,960 00	10,000 00
	Coopers	64,800 00	60,000 00
	Sculpture	3,888 00	3,000 00
	Photographies	4,320 00	1,080 00
	Brass music instruments	9,720 00	7,560 00
	Gloves	27,000 00	20,000 00
	Wax candles	19,440 00	10,000 00
	Brooms	1,620 00	1,000 00
	Brushes	8,640 00	8,040 00
	Umbrellas	15,120 00	10,120 00
	Boots and shoes	8,640 00	16,000 00
	Soap and tallow candles	194,400 00	195,000 00
	Matches	8,640 00	9,640 00
	Earthenware	4,320 00	3,320 00
	Tan yards	46,440 00	46,240 00
	Flour-mills	15,120 00	10,020 00
	Silk	10,800 00	12,960 00
	Woolen goods	5,400 00	8,000 00
	Distilleries	100,000 00	106,185 60
Gaia	Ropes and cables	10,800 00	10,000 00
	Limekilns	1,080 00	1,000 00
Calvaria	Woolen goods	540,000 00	378,000 00
Moncorvo	Soap	9,720 00	9,000 00
Lameiras	Woolen goods	34,560 00	30,000 00
Rasa	do	5,400 00	5,000 00
Ladeira de San Antonio	do	31,320 00	30,600 00
Cerea	do	10,260 00	10,000 00
Ponte	do	14,404 00	11,000 00

Table showing mechanical, manufacturing, and fishing industries of Portugal, &c.—Cont'd.

Districts.	Industries.	Capital.	Estimated annual production.
Sampaio	Woolen goods	$9,180 00	$9,000 00
Mello	do	9,720 00	9,000 00
Rio Porto	do	10,800 00	10,000 00
Moimenta da Serra	do	97,200 00	90,000 00
San Pedro de Parabos	do	75,600 00	70,000 00
Rocha	do	19,440 00	19,000 00
Alvoco da Serra	do	77,976 00	70,000 00
Abelheira	Paper	162,000 00	100,000 00
Coimbra	Glass	49,889 93	54,000 00
	Macaroni	52,920 00	40,000 00
	Woolen goods	86,400 00	43,200 00
Braga	Cotton goods	140,400 00	108,000 00
	Paper	162,000 00	97,200 00
	Iron	108,000 00	90,000 00
	Soap and tallow candles	9,720 00	21,000 00
	Tanyards	43,200 00	21,600 00
Aveiro	Porcelain	8,640 00	53,730 00
	Woolen goods	32,400 00	30,000 00
Peniche	Laces	21,600 00	19,440 00
Soria	Cork	64,800 00	64,000 00
Leiria	Woolen goods	337,500 00	480,600 00
	Glass	97,200 00	109,488 24
	Resin	2,160 00	1,404 00
Azores Islands	Earthenware	18,360 00	12,744 00
	Soap	2,052 00	2,000 00
	Writing paper	8,000 00	8,640 00
	Nails	21,600 00	7,020 00
	Distilleries	73,440 00	99,532 80
	Cotton goods	1,080 00	3,240 00
	Tobacco	117,720 00	76,087 44
Madeira Islands	Sugar	54,000 00	71,000 00
	Lace	6,000 00	14,011 81
	Hats	5,000 00	8,316 00
	Willowware	4,000 00	7,174 00
	Alcohol	3,000 00	3,240 00
	Beer	10,000 00	10,800 00
	Bakery	17,280 00	21,600 00
	Tobacco	10,800 00	15,000 00
	Wooden carved work	2,000 00	2,963 41
	Artificial flowers	500 00	666 03
Total		12,942,403 13	13,910,218 69

NEW COTTON MILL ON THE SAINT CROIX.

REPORT BY CONSUL LANGE, OF SAINT STEPHEN.

The water-power of the Saint Croix River, which forms a portion of the boundary between Maine and New Brunswick, and the splendid opportunities offered on its banks for the carrying on of manufacturing industries of various kinds have long been recognized. Walter Wells, superintendent of the hydrographic survey of Maine, in his report on the water-powers of Maine, published in 1869, says:

> The great lakes at the source of the river on both its branches can be flowed to almost any extent, securing an indefinite increase of power. Artificial reservoirs, also, are peculiarly feasible, there being a large amount of low land upon the river susceptible of ready conversion into storage basins at moderate expense. The delivery of water can be made practically constant.

And, again, in speaking of one of the eight powers he mentions and describes, he says:

> A storage of only four feet upon 100 square miles of lakes connected with this river would yield for 10 hours a day, 312 days per year, a gross power of over 8,000 horse or 320,000 spindles on the Calais Falls alone, 72 feet.

This valuable power has, up to within a year, been monopolized by manufacturers of lumber, the aggregate production annually being about

100,000,000 feet of lumber sawed. As early as 1835 attempts were made to utilize the powers for other purposes, surveys of that at Sprague's Falls (so called) and specifications and plans of the adjoining land being made in that year with the object in view of establishing a cotton mill. This, however, and various subsequent efforts were defeated, and nothing in this direction of encroaching on the privileges of the lumber manufacturers was accomplished until the rigid system of protection adopted by the present Government of the Dominion, when they came into power in 1878, again directed the attention of capitalists to the matter of utilizing such portions of the stream as were yet unoccupied.

In 1881 a number of the leading citizens of Saint Stephen, New Brunswick, and Calais, Me., procured the services of D. M. Thompson, C. E., of Providence, R. I., to inspect the different available sites on the river. He reported very favorably, strongly recommending the Salmon Falls (so called) at Milltown as the most advantageous. Subsequently, A. D. Lockwood, of Providence, R. I., a gentleman interested in the manufacture of cotton, visited Saint Stephen, and, by request, expressed his views in the following terms:

> I will say that your water power and local conditions are exceedingly good and unusually favorable for cheap construction of dams, wheel-pits, and mill buildings. You have an ample supply of water, cheap lumber, and abundance of labor, good transportation facilities, both water and rail, a river not subject to sudden or extensive freshets, little or no floating ice, which is often very troublesome in cold climates, a fair farming country, a healthy climate, and a home market for manufactured goods. These, with the proper amount of capital, suitable engineering, and competent management, constitute all the requisite elements of a successful manufacturing enterprise, and were I seeking a place to start a manufacturing interest, I do not know of an opportunity promising better results than that presented by the condition of things as I found them at your place.

Shortly after this a proposition was made to Mr. Lockwood and Lewis Dexter, esq., of Providence, representing a company of capitalists, by which it was agreed that a bonus of $30,000 and exemption of their lands and buildings from taxation for a period of 10 years would be allowed them, provided they would undertake the construction and operation of the mill. The proposal was accepted and work on the mill begun. On the 24th June, 1881, the corner-stone of the main building was laid. Since then the structure has been completed, and, on the 24th June, 1882, the water was turned on and the machinery that had been placed set in motion. Although the whole of the plant is not yet in position, cloth is now being turned out daily, the value of that shipped during the month of October last being $26,000.

The capital stock of the mill is $1,000,000, with $500,000 paid up. Of this from $170,000 to $180,000 is the investment of merchants of Calais and Saint Stephen, the remaining portion being furnished by capitalists of Providence, R. I. The amount expended in construction and equipment to date is estimated at from $450,000 to $500,000. Twenty-six thousand spindles are now running, but this mill has a capacity of 56,000 spindles, in the operation of which about 600 men, women, and children will be employed, of whom 350 are now engaged.

The buildings consist of the main mill, 417 feet 4 inches by 98 feet 8 inches, with four stories and a basement; the picker building, 82 feet by 103 feet 4 inches, with two stories, connected with the main building by a two-story building 37 feet by 18 feet; the dye-house, 137 feet 4 inches by 62 feet; the boiler building, 75 feet 8 inches by 62 feet; the wheel-house, 95 feet by 32 feet, and a machine-shop, 62 feet by 143 feet.

In each corner of the main building is a brick inclosed stairway, 11 feet

2 inches by 23 feet, running the whole height of the building, and connected with each flat by doorways 5 feet 6 inches wide, provided with doors covered with tin on the side next the mill. In case of fire these doors can be shut and all possibility of the flames reaching the stairways cut off. These tin-covered doors take the place of and are considered much safer and more easily controllable than ordinary fire-escapes. In each rear corner is an elevator-room, 12 feet 2 inches by 11 feet, through which the cotton may be passed from one floor to the other. In the rear of the mill, also, is a tower 26 feet by 28 feet, extending 32 feet above the roof of the mill, in which is a large water-tank, with a capacity of 70,000 gallons, and sinks and other appliances for the convenience of the employés. The tank is supplied with water by means of an ordinary power-pump situated in the wheel-house, and is connected with an automatic sprinkler, which works only in case of fire, and with the fire service of the mill, which consists of four hydrants on each floor, supplied from hydrants outside by means of two rotary fire-pumps and a steam-pump. In case of fire, water can be turned on any portion of the mill in one or two minutes' time.

The basement was originally intended as a store-room, but has been all excavated, and will contain carding and roving frames, looms, and winding and quilling machines. A portion of the basement of the picker is used as a dust-room, which receives the dust from the picker machines and is connected with a dust chimney in the northeast corner. The remaining portion of the basement of the picker is used as a napping-room. The picker building contains twelve braker and finisher pickers, and, when completely equipped, will be furnished with sixteen in all.

The first flat of the main mill is used as a carding-room. In it are placed 320 Pettee cards, 16 railway heads, 48 heads of first drawing, 4 slubber frames, 10 intermediate frames, and 16 fine-rolling frames.

On the second floor are the looms for weaving. When all the machinery is placed here it will consist of 736 looms, 368 plain and 368 Thomas's four-box and Knowles's eight-box looms.

The mule-room is on the third floor and contains 16,000 mule spindles, with room for 8,000 more. The mules are manufactured by Curtis, Son & Co., England, and are the finest made. Each contains 800 spindles. On this floor, also, are long chain-warp dressing and ruling machines.

The fourth floor is devoted to ring spinning and dressing. There are now 10,000 spindles of the Whitier's make, 2 slashers, 7 warpers, 4 twisters, 4 reels, and room for 12,000 more spindles, of which 10,000 are on their way here.

The second floor of the picker building is used as a cloth-room and will be furnished with sewing machines, shears, press, brush machines, measuring machines, calenders, &c.

The dye-house is a two-story building, and the first flat is fitted up with the ordinary dyeing machinery. The upper story is used as a drying-room. It will be divided into six compartments. The sides of each of these compartments will be furnished with 16 lines of 1¼-inch piping on which to hang the colored cotton and yarn when drying. One part of the building will contain a can-dryer for use in drying warps.

Adjoining the dye-house is the boiler building, containing four boilers manufactured by the Whittier Machine Company, Boston, and used to heat the mill and supply water to the dye-house for boiling and dyeing purposes. A portion of the boiler building, 28 feet long, is used as a blacksmith shop on the first and a paint-shop on the second floors.

The three wheel-pits—16 feet by 16½ feet, 15 feet by 16 feet, and 15 feet by 16 feet—are covered by the wheel-house, one story high. The pits are excavated from the solid rock and the walls finished with cut granite. At the bottom are three races, one under each pit, and over the races the wheels are placed, the largest pit containing one 54-inch and one 27-inch diameter Hercules turbine water-wheels, and one of the other a 54-inch wheel of the same description. The remaining pit is still vacant, but will be supplied when necessity for the power arises. Each pit is supplied with water from the canal by two feeders, which may be closed when necessary by gates fitted for the purpose. The power by which the machinery is driven is supplied by the two large wheels by means of a perpendicular shaft from the center of each, surmounted by crown gears. These fit into a jack gear, controlling a jack shaft, along which the power is transmitted to the main driving pulleys on which is the belting connected with the machinery throughout the mill.

The canal, between the river and the wheel-house, is 143 feet long, and tapers from a width of 58 feet at the river bank to 38 feet at the pit. The walls are of granite, the face being cut, and at the bottom are 10 feet and at the top 8 feet wide. At each end of the canal is a rack, consisting of flat bars of iron, placed seven-eighths of an inch apart, to keep driftwood, ice, &c., from entering the canal and pit.

The dam consists of two main sections, built at right angles to each other, that on the New Brunswick side running east and west, a distance of 105 feet, and containing a log-roll, 65 feet long and 3 feet lower than the top of the dam, and fishway 5 feet wide. The section on the United States side of the river runs nearly at right angles to the other, and reaches the bank of the river at a point about 300 feet lower down than the eastern end of the first-mentioned portion.

The goods now being manufactured consist of brown cottons, Caledonia checks, and shirtings; but when the mill is in full operation will include cottonades, ginghams, ducks, &c., with a weekly production of from 75,000 to 80,000 pounds.

All goods manufactured at this mill are far superior to any others manufactured in the Dominion, and compare very favorably with the best manufactured in the United States.

The machinery of the mill is of the following makes: Kitson's pickers, Lowell, Mass.; Pettee's cards, Newton, Upper Falls, Mass.; Whitier's drawing and ring spinning frames, Whitierville, Mass.; Mason's roving frames, England; Curtis, Son & Co.'s mules, England; Thomas and Knowles's looms, Lewiston, Me., and Worcester, Mass.; Howard & Bullough's slashers, England; Lewiston Co.'s warpers; Whitier's spooling. The machinery for the cloth-room was made by G. H. Bushell & Co., Worcester, Mass.; Curtis and Marble, of the same place, and the Phœnix Iron Foundry, of Boston.

The mill is under the management of J. W. Brown, as agent, and A. Woodman, as superintendent, both graduates of the Bates mill, at Lewiston, Me.

The volume of the census of Canada, taken in 1881, which relates to manufactures, has not yet been published, but, as near as can be learned from the material at hand, the value of the imports of cotton for 1881 was $12,000,000, while the output of Canadian mills was only about $5,000,000 At the beginning of 1882 there were about 300,000 spindles in Canada, or 1 to 15 of the population, while the ratio in the United States is 1 to 4. Cotton stock of $100 per share sells in and around Montreal at from $124 to $175 per share.

Since the beginning of 1882 the production has been largely increased by the enlargement of old mills and the erection of new ones throughout the entire country. In New Brunswick no less than three—one at Milltown, one at Saint John, and one at Moncton—have been completed or are in the course of construction.

PAUL LANGE,
Consul.

UNITED STATES CONSULATE,
St. Stephen, 1883.

CULTIVATION OF THE ORANGE TREE IN SPAIN.

REPORT BY CONSULAR AGENT LOEWENSTEIN, OF GRAO, ON THE CULTIVATION AND PROPAGATION OF THE ORANGE TREE IN THE PROVINCE OF VALENCIA.

I have the honor to forward to you herewith a report on the cultivation and propagation of the orange tree in this province. It was made out after consulting the most eminent cultivators and authors, and in order to answer many inquiries I received in a more extended manner than would allow in the limited space of a single letter. My fervent desire is that this paper may be useful to some of the lesser instructed cultivators of this tree in the United States.

CLIMATE.

The orange tree does not thrive in the open air except above 43° latitude, and then in sheltered spots where the earth always preserves a temperature above congealment at a depth of $0^{m}.02$ to $0^{m}.03$. In these cases, the sap of the roots which is always in movement in the trees of permanent leaves, even in winter, defends the exposed parts of the tree from congealment. The thermometer has been known as low as 10° Réaumur, without the orange trees perishing, because such temperature was not sufficiently continuous to penetrate to any depth in the soil, besides which the thaw that succeeded was accompanied with a cloudy sky. In short, the orange tree can be cultivated with perfect security in the open air where the temperature is not lower than 3° Réaumur. In the spots most favored this condition is not met with at a greater altitude than that of 400 meters. When the average temperature reaches from 15° to 16° the apparent vegetation of the orange tree commences, which, as a rule, takes place in the month of March. The blossoming requires a mean temperature of 18° centigrade, Réaumur, the first flowers appearing in April and frequently continuing throughout the whole of May. The blossoms are found on the secondary branches, but principally on the tertian ones, or in general those formed during the previous year, but this rule, which is the most regular, is not the same everywhere. Selling the fruit too late, and the consequent working and manuring of the grounds (by reason thereof) out of the proper time for so doing, besides which in consequence of the scarceness of irrigation in summer, for want of water, a great disorder in the natural course of vegetation is occasioned. With reference to the height above sea-level, the majority of the orchards range between four and thirty meters. The temperature of this province, Valencia, is very mild, and while it seldom reaches as low as zero, many parts are protected from north winds by different mountains.

The climate of the districts where the orange tree is cultivated in

Valencia is, as aforesaid benign, as is shown by the fact that the orange, lemon, citron, palm, locust bean, and various other trees, as also shrubs, all of which are delicate, thrive freely in the open air. Further, the jujube, fig, pomegranate, almond, and olive trees, the vine, and the sugar-cane also flourish here luxuriantly. The dwarf fan-palm grows spontaneously.

The *résumé* of the meteorological observations made and published during the year from 1st December, 1881, to the 30th of November, 1882, at the observatory of Valencia, is as follows (barometer being in millimeters and at zero, thermometer of Réaumur, centigrade):

Meteorological observations.

	Millimeters
Average pressure of barometer	762.97
Maximum pressure of barometer (January 17)	781.01
Minimum pressure of barometer (October 27)	745.94
Oscillation	35.07

	Degrees.
Average temperature	16.2
Maximum temperature in the sun (September 30)	43.0
Maximum temperature in the shade (July 10)	36.0
Minimum temperature in the air (December 27 and January 6)	1.1
Minimum temperature in the reflector (December 27 and January 6)	0.0
Average oscillation of temperature	13.3
Average humidity	61
Maximum of humidity (May 17)	94
Minimum of humidity (April 25)	20

	Millimeters.
Average tension	11.0
Maximum tension (August 19)	23.9
Minimum tension (December 24)	3.0
Average evaporation	9.1
Maximum evaporation (July 8)	24.0
Total of evaporation	3,340.9
Rainy days	48
Days of inappreciable rain	22
Stormy days	7
Days of snow	1
Rainfall during the year	420.5
Rainfall, maximum (September 7)	92.0

	Kilometers.
Average velocity of wind	283
Maximum velocity of wind (February 26)	962
Minimum velocity of wind (January 1 and August 30)	40

Frequency of the winds. (Observed twice during the year.)

North	70
Northeast	134
East	126
Southeast	105
South	11
Southwest	37
West	130
Northwest	117

Atmospheric state.

Clear days	167
Cloudy days	97
Covered days	101
Days of calm	51
Days of breeze	274
Days of wind	39
Days of storm	1

The rain when the weather is not stormy is nearly always accompanied by south or southeast winds, and the rainiest months of the year, or at least those when the rains which are most beneficial for the soil occur, are November, February, and April, although in consequence of the great felling of trees, which has taken place during the present century, as also owing to unknown causes, the rains are much less frequent than they were last century. In this province electricity exists to a very great extent in the atmosphere by reason of the dryness of the climate and the pureness of the sky, especially in the mountainous districts.

SOIL.

The greater portion of the soil in this region is tribasic, cretaceous, and tertiary, and contains a large proportionate admixture of clay, sand, and lime, which is the true reason why the earth in this province is so very fertile, as is proved by the luxuriant vegetation, the variety of produce, and the richness of this fortune-favored district. The color of the earth in the parts where there is no irrigation is, in general, red, but this changes to gray when irrigation commences and manure is employed. In parts where vegetable refuse and abundance of farm manure form the greater portion of the soil, the color inclines to black.

The soil should be at least one meter in depth and should be subject to irrigation. It should further be of a middle consistence, silicious-argillaceous, or argillaceous-calcareous, rather damp, but without being humid. Chalky soils, more or less pure, those completely silicious, and those which are compact argillaceous, with constant humidity, are useless. In the two first the manures decompose rapidly before being of service to the roots, and they require excessive irrigation, which weakens the soil and exhausts it. In the latter the excessive humidity which is constantly retained deprives the roots of atmospheric influence and causes putrefaction. A soil composed of clayey marl or a light clay mixed with sand is most suitable for the cultivation on a large scale of orange, lemon, and other trees of the same family. The soils where the orange tree thrives well are of very distinct compositions, as there are as many orangeries on sandy as on clayey ones, but those most compact should not contain more than 65 per cent. of fine earth (with less than 0.005 millimeter diameter), and on reaching this limit they should have a sandier earth for subsoil. The same extreme limits which the orange tree admits in its physical composition are also admitted by the soil with regard to the quantity of lime contained in it, for while in certain districts (Benifayó) the earth contains no carbonate of lime, in other parts 18.29 per cent. is found, and recently a calcareous earth has been examined, the same being of great depth, and has been found to contain 57.22 per cent. of said carbonate; notwithstanding the same, the orange trees thrive well. These earths are also rich in potash, and contain this matter in an exceedingly large quantity in a form that may be considered as assimilable with the tree, so that in such districts there is no necessity of employing potash for manure. Of the other alimental principles of the plants, there is in general a limited quantity of phosphoric acid, and in some parts an addition of magnesia.

The extraordinary foliage acquired by the orange tree in a loose soil, which at the same time contains what is necessary for its proper development, may be fully appreciated in the districts of Alcira and Carcagente, in this province, which districts are the center of production, and the soil in which is loose and of great depth. A simple analysis of a sample of earth taken from Carcagente showed that it did not effervesce with acids, whilst a sample from Alcira did, and abundantly. The analysis of 100 grams of earth from Alcira gave, salt of lime (carbonate), 20 per cent.; sand (silicate), 70 per cent.; clay, 10 per cent. This analysis, which was lightly made, is sufficient to give an idea of the soil in which the orange tree thrives to perfection.

Thus it is that in other parts (Castellon de la Plana), where the soil is most compact, the growth is slower; in years when there is a scarcity of water and the orchards are not irrigated at the proper season, the earth becomes so compact as to prevent the growth of the small life-giving roots, besides depriving them of the beneficial effect of the atmospheric air, and as these roots cannot then properly nourish the trees, the latter, little by little, harden, or, in other words, the trunk and branches lose the green color they should have, which manifests the abundance of sap contained by them, and which is what preserves them tender, a thing so necessary for their growth.

From the preceding it will be seen that it is necessary to well examine the soil (should one have the idea of converting it into an orange garden) before incurring any expense, not only examining the surface, but also the subsoil, as there may be some parts where the soil is loose and of good quality on the surface, but very compact and bad beneath, or *vice versa*. By attending to this the proprietor will know what may be expected from said ground and to what cultivation it would be advisable to dedicate it.

PROPAGATION OF ORANGE TREES.

Orange trees may be propagated the same as any other fruit tree, either from seed, which is the natural way of multiplication, or from cuttings, which is artificial. The first system, viz, from seed, perpetuates the species and gives origin to new descriptions, afterwards improved by cultivation. The second method, either from shoots, cuttings, or grafting, continues the race and at the same time accelerates the fruitage, which is always later with the trees produced by the first-named system, but in exchange the trees raised from seed are more robust and live to a much greater age. The oldest orange trees found in this province clearly demonstrate that the primitive trees were raised from seed. The sweet orange does not thrive well when raised from shoots, and in order to obtain a good result it is necessary to recur to tightly bandaging them so as to favor the accumulation of juices, which contribute to the acceleration of the unfolding of the underground shoots. The bitter orange is more easily cultivated.

The following means have been employed and are still being used, as by the same frondose trees, bearing a large quantity of fruit, and this of good quality, are obtained. Said means are these: First, a flower-pot is obtained, composed of two pieces, which can easily be fastened together either with wire or strong twine passed round them at the top and also at the bottom. Then some straight branches of about the thickness of two fingers must be selected, and if said branches are very long they should be cut down to the length of 1½ meters; then the part that has to be placed in the center of the flower-pots is barked all round for about 1½ inches, and immediately bound up with esparto-grass cording. As soon as this is done the flower-pots are put together and filled with earth and stable manure, well mixed together and watered; after this they are watered once a week. At the end of a year the roots that have formed fill nearly the inside of the flower-pots, and then the branches at the lower exterior part of these are sawn off and the new come up close together they should be separated so as to admit the proper development of those which give promise of thriving, and allow those separated to thrive in other spots where transplanted. (4) If the ground is sufficiently manured the young plants have sufficient nutriment until reaching the height of about ten inches or even more.

If the soil is not properly manured, then it is necessary to assist the plant by using Peruvian guano, and for doing this various growers dissolve a small quantity of guano with the water in the watering-pot, and thus apply it to the plants; but should the watering take place by means of the small irrigating canals the guano is placed at the entry of the water into said canals, and is thus conveyed all over the nursery.

PLANTING.

As soon as the young plants have acquired a certain development in the nursery, which sometimes occurs at the end of one year and sometimes at the expiration of two, the plantation has to be commenced. This generally takes place from the middle of February to the beginning of March, according to the condition of the plants. It is commenced by arranging the soil in the same manner as for the nursery, and when this is done the nursery is well watered so as to enable the young plants to be rooted out without injuring them.

Some cultivators advise the taking up of the young plants with the earth adhering as thick as mud, while others counsel that they should be transplanted with a ball of earth attached to the roots, although said ball be of small size, so that the plants should lose less. With a mountain knife, or other similar garden tool, a series of holes are made of superficial depth to admit the roots of the young plants, which are placed in same conditions as they were in the nursery. The orange trees are planted in the plantation at a distance of from 40 to 50 centimeters apart, if wished to be of short trunk, but should the contrary be desired, they are planted at a greater distance from each other. On transplanting the young trees, a series of light beds are made and the trees are planted at the base of the same and in regular files, but on the opposite side of the beds to that where they are irrigated, thus preventing the water from reaching the young shoots.

Now and then the top soil is loosened with a weeding-hook, and thus the beds gradually get lower, until at last they are level with the surrounding earth at the time when the plants have taken firm root and are flourishing. The plantation is irrigated once in every three weeks in ordinary weather, but oftener should it be very dry; and about at the end of two or three months after transplanting, say in July or August, a small quantity of guano or of rotten dung may be applied. At the expiration of a year in the plantation, the young trees are sufficiently advanced for grafting, should they have been tended with great care and are required for trees of short trunk; but should they be required to be of long trunk, every means should be availed of for favoring the development of the terminal bud. To this end, every year about June, by means of nipping, the too forward growth of the lateral buds is checked. In April, branches, leaves, and thorns on the lower half of the stem are cut off, as are also the lateral branches above the same, which are vigorous.

This same care is bestowed every year until the stem, straight and devoid of knots, reaches a height of from 1½ to 2 meters, when grafting is effected on its upper part. Should any of the plants take a crooked direction, they are cut off in April of the second year at about 10 centimeters from the surface of the soil, when they shoot afresh during the summer, and when the shoots have reached a height of about 20 centimeters the most vigorous are selected and the rest done away with. In this province, trees of short trunk are those invariably grown, consequently this last plan is but little, if at all, availed of.

GRAFTING.

This is one of the most important means for the propagation of the orange tree.

Grafting consists in the insertion of a branch or cutting of one plant into another, which operation has to be carefully done, so that both may unite and ultimately form a single plant growing on the same stem. Grafting is also done on a plant with some of its own shoots.

Grafting is principally performed with the object of procuring flowers, leaves, wood, or fruit of superior quality or more merit than that previously obtained.

Grafting also serves for the propagation of many trees and bushes, both exotic, rare, and delicate, by employing specimens of wild, rustic, and strong plants that may be analogous, or of the same family, so as to improve the budding of the branches of a plant which has become stripped of same (in the regions where the cultivator wishes to augment the growth and reproduce the species), and also to unite on a single branch the male and female flowers of vegetables normally "*diœcio*[illegible]," which are thus converted into "*monœcions*" and their fertilization vastly improved. The "graft" is the name given to the shoot, or branch, &c., inserted in another, and "parent" is that in which it is grafted; and the plant obtained is called "franco" when both are raised from the same class of seed, and "bastard" when from different species. With all grafting it is necessary to put similar textures in contact, and above all the generating layers or vegetative zones of both parent and graft, and at the same time impede the access of air and light to the uncovered part, or the wound. It is not, as it is generally believed, the joining of the bark which contributes to the perfection of the grafting, but rather of that generative texture or *cambium* which exists between the white wood and the bark, by which is effected the growth in diameter of the *dicotlidonéos*, vegetable substances.

In order to obtain a successful result, the operations should be performed in fine and temperate weather. The parent plants should be carefully selected, not too young, as although the grafting might be successful, they would be long in bearing fruit, notwithstanding that they would be frondose; neither too old, because although giving fruit sooner, they are of little duration; further, those selected must be perfectly sound, well formed, and possessing a clean bark. There are four seasons when the operation of grafting may be performed, viz, at the impulse, at the time of shooting, at the time of vivifying, and when sleeping.

Grafting at the impulse is done when the movement of the sap commences and the buds begin to wake out of the lethargic state in which they had been all the winter, but before they have unfolded. The season for doing this is from the middle of February till the commencing of April, and it is done by grafting twigs of the previous year.

Grafting at the time of shooting is when the sap is at its greatest activity and when the shoot has attained half or three-quarters part of its definite growth. This system is generally carried into operation from the commencement of April till end of May, and the ingrafted shoot availed of is a tender shoot of the same vigor as that of the portion of the parent plant where it is to be ingrafted.

Grafting at time of vivifying is so called because it is done at the solstice and when the shoots commence to put forth their second sprouts, which occurs from about the end of May till the end of June. The cuttings for grafting on vivifying are selected from twigs of the same year.

Grafting when sleeping is done at the equinox in September, and only differs from the previous system in that the graft on vivifying commences immediately to shoot, whereas that grafted whilst sleeping does not commence to move until the following spring. This system may begin to be adopted from the end of August till about the middle of October.

A successful result greatly depends on the intelligence, skill, and care of the grafter, as also on other conditions that may be possessed by him. The young shoots to be grafted are frequently spoilt by workmen whose hands perspire copiously, and the same also occurs from bad breath either from disordered stomach or smoking to any extent, in the cases where the grafter is accustomed to hold the ingrafted shoots and buds between the teeth whilst preparing the *patron*.

The object of the ligatures is to subject and fasten the graft to the parent tree, and those are best which possess sufficient elasticity not to either lighten or loosen too much, as also suffer but little from atmospheric influences, and further they should be of slight cost and easy acquirement, preference being given to those belonging to the animal kingdom, such as raw and carded wool, worsted, silk, or horse hair. Of the vegetable kingdom the following are best: hemp, flax, esparto, enea, reed-mace, various flexible barks, and the leaves of certain trees possessing the same property.

With the graftings it is necessary that the cuts and wounds in the *patron* should be properly covered and protected with substances suitable for said purpose, and which ought to combine the advantage of slight cost, easy manipulation, shortness in preparation, duration, and perfect protection. The materials most generally employed are the following: grafter's clay, which is of ancient use, and is composed of two-third parts of clayey soil and one-third of cow dung, well mixed together; and to this are sometimes added dry herbs chopped very fine, and by some a small portion of salt is also employed in the mixture. Softened pitch is also made use of, not alone, as it would dry and peel off, but melted with a corresponding quantity of wax or tallow, or of resin and tallow, to which is added red earth or brick-dust.

A good receipt for this mixture is as follows:

	Kilos.
Resin	1.250
Pitch	0.750
Tallow	0.250
Earth	1.500

This composition should be applied tepid, but not very warm, as in this case it would injure the plant.

When a good variety has been obtained from seed, it is so subject to injury or loss from any casualty that the plants are generally grafted in order to preserve them. When the cultivator wishes robust and bushy trees of long vitality, the grafting is done with trees of the same species, but should he wish to obtain trees less robust and either of medium size or dwarf, he does this (although at the expense of obtaining a tree of lesser duration) by grafting on analogous parent trees of a distinct species to the grafts, on account of such grafts requiring a greater quantity of sap than can be given them by the respective parent plants, for which reason they remain small, have but few branches and roots, and the buds are of but brief duration.

As a general rule two cuttings are grafted on the same trunk, sometimes with the object of greater certainty, and sometimes for the purpose of the trees sooner forming their top. With reference to the numerous buds that appear when the graft commences moving, all are suppressed except those nearest to where the grafting was made, in order to draw the sap towards said point. Should they develop too much, the points are cut off, which is done when the graft attains a length of $0^m.15$.

The universal system employed in this province for grafting of orange trees is the following: If the nursery has been well cared for, at the end of a year the small free orange trees are grafted, whilst those which from some special circumstances have not sufficiently developed are left for the following year, and it is recommended that the grafting should be done in that part of the nursery where the plants are thickest, as being very close together impedes the moisture from disappearing from the soil, the sun not being able to penetrate through the plants evaporate the dampness, as it can when the plants are scattered or isolated. This should be greatly studied in those parts where water is scarce in summer, and it is the plan followed by the majority of cultivators who have nurseries.

Nearly all systems of grafting may be employed with orange trees, but in this province the only one now universally adopted is that of the grafting of a bud, which gives excellent results, giving preference either to the method of *jouette* (*á ojo velando*) or to that of *vidry* (*de ojo dormido*), according to the season when the grafting is effected, viz, the first from April till end of June, and the second from August to October. One of the most intelligent cultivators of orange trees in this province grafts when the sap is moving, doing so from the time it commences to move until Saint Peter's day (end of June), and also when the sap is dormant, which is from August till October, cutting the shoot in February. The buds for grafting are taken from the center of the tree, as it has been found that if taken from the lower part the branches of the tree produced always incline towards the earth, and young twigs are not liked, as they produce large trees, bearing but little fruit. The buds for grafting are selected from those of the previous year and of the June shooting; and according to the size of the parent stem, one, two, four, &c., are placed, for should the parent stem be thick and have only one bud grafted on it, the excess of sap would suffocate it. On placing the buds, the parent stem is probed and they are applied to the most salient parts which this may present, because it is considered that it is here where there is the greatest quantity of sap, and it should be done when possible in the part facing the north, so as to suffer less from the heat of the sun; besides which one can work better. The grafts should be tied with esparto grass, this being found much better than other strings or cords by reason of the less damage it causes to the bark; besides which it better protects it. It remains in this state for twenty-one days, and if at the end of this time the bud continues green, the grafting is correct, in which case the shoot is cut off about four inches above, and it at once moves, if it has dried. Sometimes it commences moving before the grafting has throughly taken place, in which case it is immediately cut, although the twenty-one days may not have expired. As soon as the shooting commences, cut the esparto on the opposite side if there is only one bud, or at the sides if there are two, but do not take it off. It is calculated that about three hundred can be grafted daily, and when the grafting is done in fine weather it is much better, but it does not matter if done when raining, as neither through rains nor irrigation have the grafts been lost, although there are some who do not irrigate until at least twelve days after grafting. The four inches of stem which remain above the graft, and which served as a support for the growing shoot, are cut off at the end of a year, and before removing the plants from the nursery.

The proprietors taking but little care in providing themselves with good seed on grafting, and the grafter, whose only aspiration is to obtain his day's pay, taking everything that comes nearest to hand and costs him least trouble, it frequently happens that fatal results are the consequence. The same recklessness is noted with those who purchase orange trees already grafted and who take no trouble to ascertain their origin, &c. For the preceding reasons it is not surprising to see sickly orange trees in all directions, and others, although sound, producing but little fruit, and this of bad quality, thus occasioning a heavy loss to the imprudent and careless proprietors, which they could have easily prevented if they had not overlooked that the grafts inherit the good and bad qualities of the tree which produced them, as also of its state of sickness or disease, as also of its healthy condition; thus it happens that in a small field of only six hanegadas of loose earth, and the whole subject to the same cultivation, in which, by reason of the carelessness of the owner, there are three descriptions of orange trees, each of different merit: there are some that give a flat fruit, with a fine skin or peel; others that are round and with a finer peel than the preceding, with abundant flesh, and as juicy as the former but sweeter; and lastly, there are others the oranges of which are very coarse and less esteemed by exporters.

TRANSPLANTING.

The tree lives, strikes root or the contrary, is more or less well formed, gives better or worse fruit, according to how the plantation may have been more or less carefully attended to, the health and duration of the plant being also subordinate to this operation. The outcome of the plantation does not only depend on the nature of the soil, but also on the age of the trees transplanted, as the younger they are there is much greater probability of their taking root. A soil well broken up is better for a plantation of trees than any other; but very few persons take this trouble, contenting themselves with opening holes at regular intervals in a slightly worked soil. The trees with horizontal branches, or curved at the tip, give fruit sooner than those that have vertical or nearly vertical ones. As a general rule the holes made in virgin earth and of the best soil are about a meter in diameter by one in depth, but in dry and hot soils they should be two meters in diameter by 1.30 in depth. These are made the winter previous to planting, in order that the earth extended and deposited round the edges, as also the sides of the holes, may improve from the action of the air; and in the neighborhood of each hole is placed about a cubic decimeter of well-rotted manure, or should this not be obtainable it may be substituted by four pounds of dried and pulverized blood, or six pounds of guano. Should the soil where the planting is to be effected be of bad quality, the half of the earth extracted from the hole is replaced with a similar quantity of clayey silicious or chalky clay soil. The manure must be perfectly mixed with the half of the best earth extracted from the holes, and the half of this is deposited at the bottom of the hole in the form of a spreading cone. The tree is then placed on said cone in such a manner that the neck of the root, when the hole is filled in, will not be deeper than it was in the nursery, as should that limit be surpassed the root, being deprived of the action of the air, would only work imperfectly. The only exceptions to this rule are the transplantations to dry, arable ground, and in this case the neck of the root is placed at about five centimeters below the surface. Being thus placed, the roots are covered with the remaining earth that had been extracted, and the holes should be so filled up that the soil thrown in them should reach the height of six or eight centimeters above that of the surrounding surface, so that on settling down and becoming firm there should be no profundity at the foot of each tree, and the earth thus raised is arranged in a hollow. When the plantation is thus made it should be immediately irrigated, so that the earth should remain in immediate contact with the whole of the roots, and this irrigation should be several times repeated during the months of April and May, conformably as the weather may be more or less dry.

In this province the custom is to make the holes at the time of transplanting, there being few that anticipate this operation, and then the holes are only made of sufficient size to conveniently plant the young trees, for the soil not being virgin, it is neither necessary to work it so much nor for the soil or hole to receive the beneficial effect of atmospheric influence, as in the first case, which is indispensable. According to experts, orange trees do not require very deep holes, it being preferable for their roots to be near the surface. Plantations of little depth thrive better; they give more fruit and are healthier; thus, placing the young trees the same as when in the nursery, and taking care that the grafts are from about 4 to 6 inches above the surface, the plantation is well done. After having completed everything necessary for the transplantation, the nursery is well watered and the young trees are dug out with a large spade, with a good quantity of earth adhering to the roots, which earth is surrounded with rotten or dried leaves and tied round with cords; and it may be mentioned, the speculating dealers take as little earth as possible from the nursery so as not to impoverish the soil. When the orange trees are conveyed to the spot for planting the first thing done is to line the bottom of the holes with the earth first taken out until it is calculated that on planting the young tree it will be, after irrigating the soil, at about the same depth as when in the nursery, and as soon as the tree is placed in position the virgin earth remaining round the sides of the hole is thrown in. There are some who throw in a basketful of burnt earth and vegetables, taking care that the same does not come in contact with the capillary roots, which form what are vulgarly called *cabellera ó barbada* (false hair, or bearded). If the plantation is done in November there is no necessity for employing more manure, that already made use of being sufficient; but in February, when the time for budding or sprouting approaches, a certain quantity of manure is mixed with the soil at a little distance from said capillary roots to oblige them to go in search of it, by which means they enlarge and gain strength. Before closing up the hole about twenty liters of water should be thrown into it if there is a probability of irrigating the orchard within a few days; but should the contrary be the case, a small quantity of earth is thrown on top of the twenty liters of water, after which a similar quantity of water is added. It is a matter of importance that the proprietor should be present when this is done, as it frequently happens that the water is thrown in so hurriedly that it does not reach the bottom of the hole, thus the roots of the orange tree do not come into contact with it and are consequently either longer in developing or else dry up and die. On planting it is absolutely necessary that the earth round the roots should be like mud, so as to prevent any *contretemps*, and later on, when the time for irrigation arrives, the whole surface is watered and now and then is dug up, the condition of the soil being improved little by little by fresh tillage, the ground around the trees being kept well free from weeds. The soil should be kept sufficiently damp, and the orchard should be irrigated at least twice a month should the weather be dry. There are some who plant the young trees just the same as when taken from the nursery, while there are others who lop off the branches and cut off about 9 inches of the tree in order that it may sooner commence budding; but this it is not always necessary to do. If on rooting up the young trees some of the roots are injured and have to be cut off, if there are many some of the branches should also be done away with, there being an intimate relationship between the roots and branches; hence it is easy to understand that if on transplanting a young tree the roots are nearly intact there is scarcely any necessity for cutting off or reducing the branches, while on the contrary, if a portion of the roots have to be cut off, the branches should be proportionately reduced.

CULTIVATION OF THE ORANGE TREE.

The orange, the same as all other fruit trees, may be submitted to two different systems of cultivation: *extensive* or large cultivation, which means planting the trees at a good distance from each other, and availing of the intermediate soil for other crops, and *intense*, which is the cultivation in gardens, where the trees of short stem are planted close to each other and subjected to very careful operations. This latter system of cultivation is more costly than the former, but the results obtained are more certain, better, and more abundant. For extensive cultivation, plants of about the height of from 1 meter 50 centimeters to 2 meters, and a diameter of about 3 centimeters, at a distance of a meter from the surface, are selected, and if only a single row is to be cultivated there is no need to trouble about how the trees are planted. Should the plantation consist of various rows close together, either the threefold system is adopted, each three trees forming an equilateral triangle, or else that called *marco real*, which is when each four trees form a perfect square. Employing the first system, more trees can be planted per hectare, and the soil can be tilled in three different directions, while in the second case it can only be tilled in two. When only one row is planted the trees are placed at a distance of about six meters from each other if the soil be rich, and at only five meters if it be middling. Should intense cultivation be adopted, the trees are planted at a distance of from three to five meters from each other. In many parts of the province of Valencia the *marco real* of six meters is adopted, 276 trees being planted per hectare.

CULTIVATION OF THE ORANGE TREE DURING THE FIRST YEARS.

As soon as the transplanting has been effected, which generally occurs during February and March, the formation of a garden should be attended to without delay, so as to have the plants in a productive state. The rule observed by cultivators in this country is so notably different as to confound the most practical gardener, but that which has been adopted by various intelligent cultivators, and which has obtained the best results, is the following:

First year.—Ridges are formed at the sides of the rows of orange trees at about the distance of 75 centimeters from the trees. In the month of April the trees are each manured with one or two pounds of guano, or else with stable dung, or sewage, at the distance of about 50 centimeters from the trunk, to which a trench is dug around it, in which the manure is placed and afterwards covered over. The orange tree thus receives the irrigation from the space between the ridges, the rest of the earth remaining intact; thus the trees are prevented from getting dirty, and both work and money are economized. When the season for irrigation arrives a thorough weeding takes place; thus the soil is cleared and continues clean. The irrigation is continued at its proper time in order that the trees may not suffer, after which the corresponding weeding is effected.

Second year.—In February, previous to the moving of the trees, two or three pounds of guano, or stable dung, is given to each tree as aforesaid, but placed at the distance of 75 centimeters from it, or, in other words, at the edge of the ridges. Later, one or two baskets of any kind of manure are distributed around each tree; this may be done in April, which is the best month for doing it, but at any other time it may also be effected. The necessary irrigation and weeding must be strictly attended to, so as to preserve the orangery in good condition, and should any tree bear fruit, this should be plucked.

Third year.—In this year the young roots of the orange trees have reached as far as the ridges and the trees commence bearing fruit, which should be plucked as soon as salable, before Christmas, if possible, so as to be able to work the soil in February. There are some who counsel the plucking of the fruit as soon as it appears on the trees, without waiting to derive pecuniary advantage from it, leaving this for the following year. The ridges are now broken down, the whole superficies irrigated, and *hormigueros* are made. At the distance of a meter from the trunk of each tree small holes are dug with a spade, and after placing two or three pounds of guano in each they are covered up. After doing this the *hormigueros* are spread over the surface, the soil is irrigated, and at the opportune moment the ground half way between the trees is plowed, great care being taken that the plow does not touch the roots; the earth all round the tree must be well weeded and loosened to about the depth of two inches. Watering, plowing, and weeding throughout the year.

Fourth year.—From the previous year, the cultivation to be given to the orange tree when in a state of production has already commenced. The fruit is plucked as soon as possible. *Hormigueros* are not made this year. The soil is dug up or plowed from twice to four times, and is manured. The principal manure employed is guano, of which about thirty-six kilograms per hanegada are used. But should stable dung be employed, about six basketfuls are given to each tree, and it may be mentioned that there are some cultivators who use more manure during these first years. Pruning the orange trees is now commenced, the same being confined to a cleaning, and this should be effected between February and May, preference being given to the earlier months of this period. This is henceforward repeated every year, and, in order that the wounds occasioned to the tree may be of easy healing, the branches or shoots pruned off are always the thinnest or most delicate. Should the trees be required to be low and wide, the cultivator limits himself to checking their upward growth and favoring their spreading.

Certain intelligent observers maintain that it does not in any way prejudice the tree to lop off all the lower branches, which there is a certainty that if allowed to grow will rest on the ground as soon as they commence bearing fruit, thus impeding the necessary tillage. With reference to the remainder, it is prudent that they should be respected, and even the whole of them left untouched should it be noted that the tree does not suffer in its growth from an excess of branches, as said branches will later on distribute themselves, being obliged to do so from the weight of the fruit on them, and then a fitter pruning can be effected and the trees left in the condition in which they ought to be, the branches prejudicial either to the tree or its development being easily removed. The want of attention to this is the cause of various pruners finding their trees when least expected with fewer branches than the trunk could nourish, and consequently yielding less fruit than they ought to do.

The pruning is another of the most important operations of arboriculture, and very important in the cultivation of orange trees, for the following reasons, which it has for object, viz:

(1.) To give the tree a regular, elegant, and graceful form, with relation to the spot where planted and the space occupied by it.

(2.) To obtain from the whole of the principal branches a series of smaller secondary ones, bearing floral or fruitful buds.

(3.) To make the fruitage more equal and at the same time proportionate to the strength of the tree, care being taken to avoid intermission.

(4.) To augment the bulk of the fruit and contribute towards the same being more savory, on account of its juices being obtained with greater care and more completely.

CULTIVATION OF THE ORANGE TREE WHEN IN FULL PRODUCTION.

As has been seen, little by little many modifications have been introduced in the cultivation of this tree as it goes on developing. When the tree is in full production the cultivation is as follows: If the orchard is small, *hormigueros* are made one year, and the following one manure is employed; but should it be large, *hormigueros* are made in one half and the other half is manured. The following year the part where the *hormigueros* were made is manured, and in the other part where the manuring was effected *hormigueros* are made, and this system is successively continued alternately. Should the fruit be sold at Christmas, the soil is worked in February and March; but should the fruit not be sold at said period, the only thing to be done is to wait till it is plucked and then work the soil when possible. As soon as the tree is bare of fruit, the pruner commences his work, the best time for this being the end of February and during the whole of March. All dry branches are cut off, as are also all rickety shoots and the crooked branches which cross one another, and some of those from the center, when there are many close together; in short, all those branches that are calculated to prejudice the tree. The orange trees must have sufficient space between each to allow of good ventilation, and they must be properly protected to enable them to resist the abrupt changes of temperature and at the same time give the full quantity of fruit they ought to yield. An excess of wood is prejudicial to the luxuriance of the trees, as likewise to their production, for which reason cultivators endeavor by pruning to widen the scroun of the tree and check its growth in height. In September, before the trees begin to bud, they should all be well examined to remove all the young twigs that may have formed, only leaving such buds as are well placed for forming branches in the empty spaces there may be. This custom is very much neglected, for which reason trees are very frequently seen with twigs which have rendered useless the principal branches, thus disarranging the good order these should have in their proper distribution. One thing the pruner of orange trees must bear in mind is the following, viz, that the branches of these trees bear a heavy fruit, which makes them incline to either side; but there are some who do not take this into account and prune some of the branches that ought not to be touched, only fixing their attention on the place they occupied at the time of pruning, which was different to that where they previously were. Those who are not partisans of low trees, like the cultivators here, allow the orange trees a greater development and do not punish them so much in the pruning.

As soon as the pruning is finished the working of the soil is commenced. This is watered and dug up, and *hormigueros* made where they correspond, which last work should be carefully attended to, otherwise the farmer will spend both time and money uselessly. The *hormigueros* give very good results in strong and damp soils, but they are of little use in those that are sandy and dry. A sufficient quantity of combustible should be employed and the earth so burned as to be neither too much nor too little so, but at the same time be blackish. This operation must be effected slowly and with great care. In the orchards where guano is employed, which is thrown round about the trunk, the *hormigueros* are made in the parts where said manure has not been used, so that the same may benefit thereby.

In the orchards manured with stable dung, which manure cultivators are accustomed to throw down in every row between each orange tree, the *hormigueros* are made in the clear spots that have not been manured. The part of the orangery that is manured is worked as follows: Some farmers irrigate the ground and when the proper season arrives throw down the manure, digging up the soil with a spade to the depth of 25 to 30 millimeters in the clear spots, and only 2 or 3 inches deep in the vicinity of the trees. As this is being done, men go behind and level the surface with a species of narrow hoe, in order that the earth may be more united and better preserve its seasoning. Other cultivators commence by making a string of ridges from one to the other side of each row of orange trees at the distance of the extremity of the branches, and when this is done they throw down the manure, which, if in small quantity, is spread from the outside towards the trunk, or, if in large quantity, all over the space between the ridges. As soon as the manure is properly distributed the ground is irrigated, care being taken that the water enter gradually and equally, so as not to wash or carry away the manure, but let it remain where put. At the proper season the earth is burned over, and all thus mixed together. This latter system is preferable to the former, inasmuch as the water commences to dissolve the soluble portion of the manure, which thus at once penetrates the soil, and, the insoluble part being well soaked, is better mixed afterwards with the earth.

With reference to the first system, it frequently happens that the manure is spread over spots not yet properly seasoned, and in this case the surface manure or that at a small distance from the superficies is destroyed by the rays of the sun, a loss which is avoided by employing the second method.

At the expiration of a month or month and a half, should it not have rained, and the weather continue fine, the orangery is again irrigated. After watering at the proper season, two plowings are given to the soil between the extremities of the branches of one tree and another, care being taken that the plow does not touch or injure the branches, and a good weeding is given to the ground round the trunk and under the branches. There are some orangeries where the plow cannot be used on account of the trees being so thickly planted, the branches of one tree almost touching those of its neighbor. In these cases the soil is slightly dug up with a spade. This cultivation is continued throughout the year till the month of October, when the orange (fruit) begins to turn yellow, and then the plowing work is suppressed by many, who only keep on weeding to keep the surface clean. At this period of the year great care should be taken of the capillary roots, which, if cut, the tree suffers and the fruit falls off.

The person who has to direct the cultivation of an orangery must always be on the watch, both as regards the weather and the state of seasoning of the soil. Should the earth be sufficiently moist, and there be signs of wet weather, or it be thought that the ground can pass some time longer without irrigating, this is not effected, and thus the cultivator economizes the cost of the labor necessarily attendant after each irrigation. Should the weather be cold the orchard is irrigated if possible, and thus the trees do not suffer so much from it. Should a period of dry weather be followed by a lowering of the temperature at the time when the orange trees are not fully seasoned, the fruit is likely to get frozen, and, to however little an extent this may occur, the orange is useless for shipment. It is always advisable for the proprietor of an orangery to have the irrigation done by a person that thoroughly understands it, so that the water may only enter the field with the required current, in order to prevent any of the surface soil being swept away, as also to avoid the formation of any pools, especially about the foot of the orange trees or in close vicinity to them, the same being exceedingly prejudicial. According to the opinion of many experienced cultivators the orchards about Valencia may pass from four to five weeks during the summer season without being irrigated, but this should not be delayed longer, as it would only redound to the detriment of the fruit, which would not thrive as it should do. In the winter the gardens can be well left for eight or nine weeks without irrigating.

Water is so scarce in some parts in summer that frequently two months or even more pass without it being possible to irrigate the orangery, in which case the orange trees suffer a great deal and the fruit is small, thus causing a loss of importance to the grower. By giving a much deeper tillage the evil is in great part avoided, but exceeding care must be taken not to cut any of the roots, or should such occur that it should not be to the extent of causing the trees to suffer therefrom, for which reason it is best to perform the tillage gradually and by piecemeal. There are some plantations so exceedingly superficial as not to admit of deep tillage; thus the seasoning only produces effects of short duration, and when it rains said plantations scarcely benefit from the nutritive elements washed down and deposited by the rains on the surface, for as soon as the sun shines the greater portion are rapidly evaporated, having penetrated but such a short depth into the soil. These do not admit of any improvement; but it must be borne well in mind that the greater the quantity of earth turned over on planting, the tree to be cultivated has more nutritive elements, and, at the same time, requires less water for thriving.

Although all the trees of this species greatly love water, so much so that without it they cannot live, still great care must be taken not to let them have too much, as, unless graduated with the greatest rigor, it does them harm; consequently it has to be arranged according to the season and the position and quality of the earth, so that, on an average, and reckoning on soil suitable for the vegetation of these trees, it will be sufficient to irrigate the gardens once in every twenty days in summer, and suspend it during the autumn and winter. Should the earth be at all compact it is only irrigated occasionally, but should it be loose it requires it oftener. In general, the degree of watering given to the soil should be sufficient to maintain the leaves smooth and straight, without being twisted; should the irrigation be carried beyond prudent limits it is detrimental to the tree; and it may be easily known when the waterings are too frequent or exceed the necessities of the tree, as the leaves commence turning yellow.

HORMIGUEROS.

All cultivators are unanimous in agreeing that the *hormigueros* give excellent results in the cultivation of the orange tree in this zone. The orange tree itself shows by its wider and deeper-colored leaf how much it benefits from the *hormigueros*, and there are many who believe they contribute in giving consistence to the fruit. For the preceding reason the owners of vineyards preserve the cuttings of their vines, preferring the ashes of these to those of other vegetables. By these means the physical properties of the earth are greatly and favorably improved, and in addition to the seeds and roots of weeds being destroyed, so are also various insects and their grubs, besides which a quantity of vegetable ash is obtained, the use of which has always been greatly recommended, as amongst other elements the earth receives a quantity of potash, which is of great importance to plants. Notwithstanding the preceding, the system of *hormigueros* is not suitable for all classes of soils, but is to be preferred for those which are argillaceous, and the result will be much better with those which are red and humid.

The application of *hormigueros* to light, sandy soils, which are naturally acrid and poor in organic substances, always produces fatal results; but, nevertheless, there is an exception to this general rule, for chalky soils may be improved by the use of *hormigueros*, when done with prudence, as by the action of cumbustion a portion of the chalk is converted into quicklime, and the same result is obtained as if the earth had been calcined, but in this case it is necessary that the manure should be applied previous to the *hormiguero*, which is the method adopted in various parts of this country.

MANURES.

This manure is largely employed, as by the use of it the development of the orange trees is advanced, and they give a larger yield. Its use gives excellent results in the young gardens where the trees are weakly, but in the orangeries, where the ground is in itself rich, it contributes towards the fruit being swollen or blown. The quantity of guano employed varies according to the state of the orchard. In general, a bag containing from 60 to 70 kilograms is used per fanega, but there are some cultivators who use double this quantity. The number of trees planted per hanegada varying so much, some growers have adopted the rule of putting about 4½ kilograms to each tree; thus the manure of each costs about 5 or 6 reals. If the guano is thrown down dry, small trenches are dug round about each tree, in which the guano is placed and afterwards covered over, but should there be a good supply of water at hand, the guano is strewn over the earth under and round about the tree, and the garden is immediately irrigated.

The composition of the principal guanos may be, on an average, represented as follows:

Guano.	Ammonia.	Phosphates.	Azoe.	Nitrates.
				Per cent.
Chincha Islands	17 to 18	24 to 26	15 to 16	4.70
Tchabo Islands	7 to 8	30 to 32	8 to 10	4.70
Chilian	5 to 8	37 to 40	6 to 8	6
Patagonian	2 to 3	44 to 46	6 to 8	6
Baker's Islands (Pacific)	....	78 to 85	0.3 to 1.2	3.5

It will be seen from the preceding there are some guanos which are very rich in phosphoric acid, and contain but little ammonia, whilst in others the ammonia predominates, and the phosphoric acid is much less. Potash is found in but very limited quantity, and in some guanos there are no traces of it, as happens with the guano from the Lobos Islands. Magnesia is also met with, but in small quantity.

The organic substances are of easy decomposition, and cause the formation of carbonic acid, which, decomposing the silica of potash in the soil, liberates both the silica and the potash. Should the soil be poor in potash and magnesia, it soon becomes barren, although the quantity of guano may be increased. This should be well borne in mind in the cultivation of orange trees, rice, and sugar-cane.

Guano cannot by any means replace good stable manure, but it is one of its best complements, its action being immediate, due to the great solubility of its principal fertilizing elements. Owing to the preceding, the action of guano is of but short duration, and unless alternated with other manures, such as vegetable ashes, phosphates, stable dung, &c., the soil soon becomes exhausted. It is a very good custom to mix the guano with stable manure, as, in addition to economy, and the facility and equality with which it can be spread in this manner, the results obtained are more beneficial, because, without lessening its efficacy, it neither burns nor destroys the young plants, although these might come in contact with it. By means of practical trials it has been found out that 10,000 or 14,000 kilograms of stable dung mixed with 150 or 200 kilograms of guano produce much more satisfactory results than 30,000 or 40,000 kilograms of stable dung used alone, and that the earth afterwards remains in a better condition for later culture. It has been proved that a ton of guano (1,000 kilograms) is equal in fertilizing effects to 33½ tons of stable manure, to 21 tons of horse dung, to 33½ of cow dung, and to 14½ tons of human excrement mixed.

One of the most perfect known manures is human excrement. In this is found all the elements required by vegetables, and in such a state that their assimilation takes place with rapidity, their effects being equal. Fecal matters are required as much for strong as for light soils, but nevertheless a distinction should be made, viz, when the excrement is in a desiccated state it is applied to argillaceous soils, and when fresh the preference is given to light ones. The fecal matters are very energetic, and their action on the vegetation is rapid, brisk, and of short duration, but whilst contributing powerfully to the first development of the plants, they weaken the strength of them during their latter period. In short, it is a manure which quickly gives what it has to give, leaving little or nothing behind it. That human excrement is one of the most perfect manures is proved by its composition. According to Boussingault, 100 kilograms of human excrement in an ordinary condition con tain 75 kilograms of water and 24.90 kilograms of dry matters, the principal elements being:

Oxygen, hydrogen, and carbon	20.10
Azoe	0.40
Phosphoric acid	0.20
Potash and soda	1.50
Lime and magnesia	0.70
Silica and other substances	2.00

On evaporation of the water, an inert matter of which it is despoiled as soon as possible, and considering only the dry matter contained in it, its composition is as follows:

Organic matter per 100 kilograms	80.14
Mineral matter per 100 kilograms	19.85
Lost	0.01

The organic matter contains 78.66 carbon, oxygen, and hydrogen, and 1.48 azoe. The mineral matter contains 0.82 phosphoric acid, 11.00 alkaline salts, potash, soda, and lime, and 8.04 of silica and loss. In short, all the substances that enter into the composition of vegetables; above all, the azoes, soluble phosphates, and alkalies, especially potash.

According to the experiences of Hermsbtael and Schubler, it has been proved that the soil without manuring of any description can produce the seed 3 times, but if manured with vegetable manure, 5 times, and if manured with common stable manure, 7 times, and if manured with pigeon dung, 9 times, and if manured with horse dung, 10 times, and if manured with human urine, 12 times, and if manured with solid excrement, 14 times.

The employment of manures is indispensable for activating the development of the orange tree and maintaining its fertility. Without them its growth would be slow, and it would soon be loaded with fruit of small size which would exhaust the tree by reason of its abundance, and cause it to succumb long before giving its maximum produce.

The orange tree requires to be manured at two periods of its existence: During its first development it should receive it in abundance so as to activate as much as possible the formation of its branches and at the same time obtain its maximum production. Afterwards, during the remainder of its existence, only the necessary quantity for its proper preservation and nourishment should be given it, its state of vegetation indicating the frequency with which it should be manured and the quantity to be given it. In the first period of vegetation of the orange trees, manures of rapid decomposition should be employed, so that they may immediately proportion to the roots, and in abundance, the nutritive elements required by them. Such manures are the following, viz, well-prepared dungs, pigeon manure, the skins and refuse of oily seeds, guano, desiccated blood, and fecal matters. In the second period the manures of slower decomposition should have the preference, and these are horn raspings or scrapings, crushed bones, old woolen rags, horse hair, and the hair, tendons, and waste of tanning factories. The effect of these last manures endures for from five to eight years. Both classes of manure are distributed over the surface soil supposed to have roots underneath, and particularly over the parts reached by the radical extremities, which is to say within the circumference covered by the branches of the trees. These manures are buried in the soil, about the end of October, at a depth of from 25 to 30 centimeters. Liquid manures are also sometimes employed, such as fecal matters, skins, and refuse of oily seeds, and guano, the whole mixed together with a sufficient quantity of water, but the effect produced is immediate and of short duration. These should not be made use of except during the heat of the summer and at the moment when the vegetation is most active, for if applied during the winter they might lead to the putrefaction of the roots. In general, they are not resorted to except for such trees as appear languid and seem diseased, and a trench of about the depth of 5 centimeters is dug around the spot where this liquid manure is to be placed, which is afterwards covered over. In order that the earth may be fertile, it should contain all the necessary elements required for obtaining the proper development of the plant that has to be cultivated in it, and these must be in a perfect state of assimilation, but compost and vegetable and animal remains that may be added to the earth in the shape of manures, do not return to it the principles lost by it yearly with the crops raised; and Liebig, seeing that in all countries the agricultural production was diminishing, commenced a series of studies to ascertain the cause thereof, the result being such as to clearly demonstrate what was taking place. He found out that all plants required to assimilate a greater quantity of phosphoric acid than that contained in compost, and consequently proposed the employment of bones and natural phosphates, as also mineral phosphates, coprolites, &c. Hence the necessity of mixing or alternating complete with incomplete manures, so that the earth may always retain its fertilizing properties.

The method for calculating the substances which in the shape of manure should be given to the soil as a necessity, after the collection of each crop, is as follows:

1st. The cultivator should avail of all the vegetable manure obtainable from the refuse of each crop, to which should only be added the fixed principles of the fruit, the nitrogen required by it being supplied by the ammonia in the air, as also that remaining on the surface soil after being washed there by the rains. To ascertain, in this case, the quantity of nutritive principles required to be incorporated with the soil, the probable average weight of the fruit to be produced each year should be calculated, having ascertained which, and taking into account the weight of ashes, this problem is easily solved. Knowing the weight of the ashes of 100 parts of the fruit, a proportion is established which will give the required result.

2d. Should the cultivator not wish to avail of the vegetable refuse of each crop, he should add, first, the fixed principles of the fruit, and, secondly, the fixed principles of the branches and leaves. An analogous calculation to the preceding will give the sum of nutritive principles to be added to the soil in the shape of manures.

3d. The case where the cultivator only utilizes a portion of the vegetable refuse. Knowing the total quantity of leaf and branches obtained with each crop, by difference may be ascertained the quantity of leaf and vegetable refuse that is not returned to the soil, and with this datum may also be calculated the nutritive principles that should be administered, which will be:

1st. The fixed principles of the fruit.

2d. The fixed principles of that part of the leaves and branches that are not utilized as manure.

3d. The quantity of nitrogen contained in the leaves and branches which is not availed of for manure.

The study of the orange tree has determined by analysis that its ashes give the following results per cent., viz:

Composition of the ashes of the fruit.

Constituents.	Mineral manure.	Compost.
	Per cent.	*Per cent.*
Potash	20.15	15.26
Soda	10.22	12.14
Lime	30.12	30.24
Magnesia	9.02	8.10
Phosphoric acid	20.04	18.24
Sulphuric acid	1.08	4.14
Silicic acid	4.50	5.82
Oxide of iron	4.25	4.75
Loss	0.62	1.29
	100.00	100.00
Ashes of the fruit per 100	3.57	3.48

Composition of the trunk, branches, and leaves.

Constituents.	Trunk and branches.	Leaves.
	Per cent.	*Per cent.*
Potash	14.15	10.18
Soda	10.67	10.82
Lime	31.57	41.22
Magnesia	10.64	6.54
Phosphoric acid	18.82	19.47
Sulphuric acid	4.89	4.53
Silicic acid	2.82	5.45
Iron and loss	6.44	1.76
	100.00	100.00
Azoe of the leaves per 100	1.57	1.66
Ashes of the leaves do	6.32	6.30

The orange trees analyzed were from Alcira (Valencia); some manured with compost and others with mineral manure. The proportional difference noted between the assimilative nutritive principles is not to be wondered at, for, as has been observed, this varies with the same plant according to the nature of the soil and the manure employed.

DISEASES OF THE ORANGE TREE.

The development of disease in the orange trees is greatly contributed to by atmospherical phenomena, various insects, and parasitical plants, as also the neglect or limited knowledge of the cultivators.

The effects of cold, snow, humidity, dews, frosts, hail, wind, burning rust, chlorosis or yellowing of the leaves, and withering are as follows:

Cold.—This commences by destroying the tender shoots of the trees, followed by the drying up of the blossom, after which takes place the disorganization of the fruit and afterwards that of the leaves, branches, trunk, and finally roots. Crevices open in the branches, which bend and turn black, the leaves wrinkle, roll up, and die; the flowers become blackened and disorganized; the fruit loses its brilliancy, dissipates its odorous principles, loses its juice and becomes bitter, falls off the tree and rots, or if the cold has not been very intense the fruit is half frozen and remains on the tree till the following spring.

Snow.—This injures the trees, both from cold and its weight. Should the storm be heavy and the fall great, this bears down the branches and in many cases breaks some. As regards the cold occasioned by it, this does not always do harm, but when it does do so it is very frequently confined to the young shoots. Should the weather be fine both before and after a snow-storm, the cold water produced on thawing, produces its effects on the young branches, for which reason no time should be lost in shaking all the snow off them before nightfall, for should it be condensed on them, the harm occasioned would be of much greater importance. The system of placing heaps of damp straw at fixed distances between the trees, so that on setting said heaps on fire in order to obtain a smoke between the sun's rays and the trees has produced a magnificent result. If after snowing the weather continues threatening, or there be heavy clouds floating about, neither the trees nor the fruit will suffer any harm, although the thermometer might be below zero.

Humidity, dews, and frost.—An excess of humidity in the atmosphere during the fecundation of the blossom generally produces bad results, especially in such places where the ventilation is limited, should the temperature at night decline to any extent. Frost with an east wind occasions a deal of harm, but should the wind be from the north it is not so bad. Little that is economical can be availed of in large orchards, but in reduced ones the harm is lightened at small cost by availing of certain materials for shelter, of little value, which in certain districts are plentiful.

Hail.—This causes a deal of damage to the fruit. Should the storm be of short duration and the wounds occasioned by it be of slight profundity, these will soon heal up and everything continue well, but certain black stains will remain which reduce the value of the fruit. Should the storm be heavy, it completely destroys the orange, which quickly enters into a state of putrefaction.

Wind.—This exercises its influence on the orange trees in two different ways, viz, by its force and by its temperature, the injury caused being greater or less according to the position in which the orchards may lie. North, northwest, and west-northwest winds are the most dangerous in certain places on account of their temperature, for as a rule they dry up the extremes of the branches exposed to their influence, besides which the shoots of certain species become unsound. Those that cause most harm in the south of Europe, by reason of their impetuosity, are the south, south-southwest, and south-southeast, according to the position of the valleys. All these winds come with puffs of extraordinary strength, and destroy the branches unable to resist them. The only remedy in these important occasions is to cut off everything that has been destroyed and dried up. With the object of partially avoiding these misfortunes, the custom of producing trees of shortened growth has of late years vastly extended.

The burning and rust.—The disease known as burning is due in great part to the too abundant dews that fall here, which are evaporated with an excessive rapidity by a burning sun. To the same cause may be traced the disease vulgarly called "rust," or a class of mildew on the leaves of the orange trees. This manifests itself on the fruit by a red stain, which, as it increases, becomes much darker and finishes by disorganizing the pulp and rotting the fruit. The cleaning and pruning of the trees is the best known method against this evil.

Chlorosis.—The chlorosis or yellowing of the leaves, and also the withering, are generally attributed either to the superabundance of humidity in the soil, to an excessive quantity of branches having but little ventilation, to the want of iron in the earth, to a species of torpor in the absorption of the mineral matters existing in them, and to the alteration of the roots, if old. The remedy to be employed to combat this evil is distinct according to the cause by which it is produced.

INSECTS.

These attack the roots, trunks, blossom, and fruit, consequently they are organical beings most pernicious to the trees, frequently causing exceeding harm on account of their extraordinary multiplication. Of this numerous class of insects, the only descriptions which up to date have proved enemies to orange trees, lemon trees, and others of the *Auranciacea* family, which are cultivated here, are the coleopteral, hemipteral, and dipteral.

Coleopteral.—This description contains more than fifty thousand species, and only one is injurious to the orange tree, the same being called *Othiorhynchus meridionalis.* This devours the leaves and tender shoots of the orange tree, and is a class of beetle or winged insect. The young insect is sufficiently perceptible, being about a centimeter long, of reddish-black color, and with grooves on the elytron. During the daytime it hides itself in the earth, where it should be hunted and destroyed, and at night it climbs the trunks, crawling up to the extreme height of the trees in search of the young leaves and tender shoots, which it devours. In general, it is not one of the most terrible enemies, on account of the facility with which it can be found out at the foot of the trees and exterminated.

Hemipteral.—Of this numerous family there are six which are enemies of the orange tree, namely, *Aphis auranti*, *Chermes hesperidum*, *Chermes oleæ*, *Chermes aurantii*, *Chermes coccineus*, *Coccus citri*.

Aphis auranti.—A kind of small vine-grub of green color varied by black, and with long feelers, and small green horns black at their points. It is generally seen in the orange trees in the month of September, and when the trees commence to bud it usually fixes at the extremities of the young shoots a quantity of black puceron, which occasions a vast deal of damage to them, inasmuch as by reason of rendering them useless, their growth is greatly retarded. By applying sulphur to the shoots with great promptness the evil is soon and perfectly overcome.

Chermes hesperidum.—This gall-insect, called by gardeners the louse of the orange tree, is not confined to the same, being also found on other trees, such as the laurel, myrtle, pomegranate, and others. It is found in the shape of an oval body nearly hemispherical, of brown color, somewhat lucent. It prefers the under part of the leaves, but is frequently found on top of them in a line along the center nerve or stalk, being met in greater number on the young branches, and when numerous they occasion the loss of a large quantity of sap, which exhausts the trees already languid from any other cause. Fumigations of sulphur or tobacco are not at all efficacious with these insects; the only true means for diminishing the quantity of kermes consists in simply cleaning the plants with a brush or horse-hair glove, for once that the insects are separated from the branches or leaves, they do not climb up again, and shortly die. In the orchards carelessly cultivated, as also the spots having but little ventilation in which the orange trees are thickly planted and where the sun scarcely penetrates, is where this insect is principally found.

Chermes oleæ.—This insect, although more natural to the olive tree, is also found attacking the orange tree. The small shell of the female is semiglobose and of a grayish-brown, more or less dark in color. The superficies is marked with two thick transverse corrugations, which make it seem rough.

Chermes aurantii is big, oval, very long, and of a blackish-brown color.

Chermes coccineus.—This is called the red kermes, its body being round and of a bright red color. It has two long feelers, very movable, and six white feet. This gall-insect lives on top of the leaves, where it deposits from ten to fifteen eggs, producing a corresponding number of young insects of pearly-white color, which insects on growing to the length of half a millimeter turn red. The existence of this insect is indicated by the appearance on the under part of the leaves of the orange trees of some yellowish and concave spots, in which concavities they are found, and should they be allowed to spread much the tree greatly suffers from loss of sap.

Coccus citri (orange cochineal insect).—This is an hemipterous homopterous with an oval-oblong body, convex on the top and slightly swollen underneath. The color is an ashy gray approaching a pale yellow, and it is covered with a cotton-white powder; at the sides are some appendices, and the hind legs are longer than the front ones. The great fecundity of these insects causes the damage occasioned by them to be very considerable, on account of the infinity of their bites, which accelerates the perspiration of the trees. Amongst the various methods employed for its extermination, the only one which, up to date, has given good results has been the employment of slaked lime squirted over the branches and leaves by means of a gardener's syringe or small hand pump, taking care that all parts infected are touched. This operation is effected when the vegetation commences, which is when the insect takes up its berth. The trees attacked should be immediately pruned and cleared so as to augment the ventilation and allow the sun to penetrate in every direction.

Diptera.—There is also a dipteran which is an enemy of the orange trees, known by the name of *Ceratitis hispanica*, or orange fly. This insect in grub state lives in the pulp of the fruit, which it alters profoundly and causes the same to fall off from the tree before its maturity. The insect is one-half of a centimeter long; of a black color in the ground, although with some yellow-whitish spots and lines; the wings are transparent and crossed by four yellow and black ribbons; the belly peduncular and round behind. The female possesses a borer with which it pierces the skin of the fruit to place an egg in the hole thus prepared. This egg produces a grub which disorganizes the pulp of the fruit and makes it fall to the ground, where it suffers its last metamorphosis. The female deposits her egg when the oranges are still small. By the time the putrid orange falls down, the grub has already arrived at its complete development, and left the same, penetrating in the earth to proceed to its transformation. This winged insect appears in the beginning of the spring. The grub does much harm to the orangeries of the South.

Ants and spiders.—Ants not only injure the fruit but impart to it a somewhat disagreeable smell and flavor; they frequently establish themselves at the foot of the trees and form galleries in all directions amongst the roots, causing such trees as are attacked to languish and ofttimes to perish from the formic acid spread around them, which acid burns the young roots. In this case it may occasion damage to the trees. When an ant-hill is found in the neighborhood of a tree, the following is recommended as an excellent remedy, viz, to take a flower pot, closing the hole in its bottom, and placing it upside down at the side of the hill. The ground is then well watered, and the ants, finding this convenient shelter, shortly shift their quarters there, taking with them their wives and grubs, so as to keep them warmer. By repeating this operation two or three times they disappear.

Spiders are carnivorous and feed on the blood of the insects they may catch, for which reason they occasion little or no damage to the orange tree.

PARASITE PLANTS.

1st. *Demathium monophyllum* or *Carbon.*—This is the most common and, at the same time, most dangerous. The unseen stamens and pistils of these plants, although but slightly adherent to the vital parts of the orange tree, multiply with an inconceivable facility. Some call it *fumago citri*, on account of the smoky appearance presented by the shoots attacked by the disease. Its appearance is that of a black powder, the congregated particles of which extend sidewise and form a species of very thin crust, which finishes by covering the trunk and branches. An infinity of small and fine peduncles grow out of said crust, bearing on their apex a cellule or black spongy substance, which contains the spores or seed. It is a true arthrosporic excrescence, in which the reproductive organs appear in abundance and confounded with those of the vegetation of the cryptogamia. This fabulous quantity of germs naturally causes the reproduction of the parasite to be exceedingly rapid, especially in damp and shady spots, but it must be borne in mind that it but slightly adheres to the sides of the orange tree. The aspect of an orchard infested by this parasite is sad and disconsolate; the bright and cheerful verdure of the brilliant leaves of the orange trees completely disappears; the branches and foliage acquire a blackish and dark shade, and the fruit loses its yellow or golden color, being also covered with a dark incrustation, or black smut, and falling off the trees entirely altered.

2d. *Lichen aurantii.*—This is the other cryptogamia, equally parasitic, and likewise occasions much damage to the orange tree. It presents itself in the form of a thin substance, not thick in growth, and of a whitish gray color, covered with small protuberances, which have the appearance of organs of fructification. This plant is really more detrimental and dangerous than the other, in consequence of the tenacity with which it fastens itself on the different parts of the orange tree, but it is fortunately rarer, and the late years of dry weather have caused it to disappear from various gardens of the Mediterranean littoral, which were infested with it.

For the destruction of both parasites, slaked lime is recommended, but the better system for destroying not only these but also all other lichens, existing like parasites, which fix themselves on the trunks and branches of trees, paralyzing the functions of same and rendering them unfit to produce an ordinary crop, is to well prune the trees, so that the air, wind, light, and solar rays may thoroughly penetrate them. In such gardens, where the trees are very numerous and where the trunks are very close together—above all in such spots as the hollows of valleys or humid plains—the trees should be thinned out in such a manner that the branches of the trees cannot interlace, and that the atmospheric fluids may have free access on all sides.

Ulcers.—When a tree receives a wound penetrating to the ligneous part and leaving the same exposed to the air, atmospherical humidity, and rain-water, it alters the exterior coats of whiteness and promotes the *spilling* or wasting of a dark liquid of much acridity. This spilling or wasting impedes the formation of small excrescences on the edges of the wound, which are the commencement of its cicatrization, so that, instead of the wound closing up, it continues opening more, little by little, gradually changing the bark around it and the ligneous part of the tree. Such a wound may cause the death of the tree. This disease is known by the name of "Ulcer" or "Gutter." The ulcers are produced with much greater facility when the wounds present a less united superficies and are more separated from the vertical, as in such cases the rain-water is better retained in them. The most efficacious remedy to be employed in such cases is as follows: Commence by removing all the altered part until a perfectly clean wound is presented, which should be left in this state and in contact with the air for one or two days to dry it up, after which it should be completely anointed with ointment. Several ointments have been proposed as effective, viz, first, the "Ointment of San Fiacre," composed of clayey soil, cow dung, and goats' hair or wool, and afterwards a grafting mastic, which should be composed of substances not liable either to melt under the influence of the sun or crack from frost. One of the best compositions is the following:

	Per cent. of weight.
Resin	28
Burgundy pitch	28
Yellow wax	16
Tallow	14
Sifted ashes or ocher	14
	100

This mixture should be applied sufficiently warm as to be in a liquid state, but not so much so as to affect the texture of the trees, applying it with a brush. This ointment should be preferred to those which become defective through heat and are washed off by rains.

The disease of the orange tree, known by the name of *Mal de Goma*, is the most to be feared, as it causes such immense losses to cultivators. This disease consists of a gummy oozing, generally occurring either in the spring or in the autumn. It attacks either the trunks of the trees just above the surface of the soil or else the roots themselves. This disease commences to show itself by some drops of gum appearing on the trunk, which still appears sound, but this spilling continues increasing, the bark is perforated, and the flow of gum augments, being fluid, turbid, grayish incolor, and of bad smell; the bark then raises, drying or rotting on the roots, and the plant, which commences turning yellow, weakens and dies.

Recent studies of this disease have proved that its existence is to be attributed to a microscopic fungus belonging to the group of spheroids. Where this fungus does not exist there is no disease; where the germs of it do not reach, the disease cannot unfold itself; and where the conditions of life are wanting for this small vegetable, whether proceeding from nature or occasioned artificially, the fungus dies and the disease is extirpated. The fruit of this fungus forms itself about the end of July or August, being preserved during the winter for propagating its spores in the spring.

The best remedy against this disease, and which from experience has given the best result, is sulphurous acid, mixing 15 bulks of sulphurous acid, concentrated at 66° Baumé, with 100 liters of water.

Method of application.—Remove the earth round about the tree for the circumference of a meter or so, until no diseased roots are met with. The hole should then be dug deeper, but with great care, so as not to injure the sound roots near the trunk, to about the depth of half a meter if possible. The earth extracted should be piled up to burn it in a *hormiguero.* All the roots that have completely lost their bark should be cut off, as also those which are in a state of putrefaction, and these roots should be burnt. Afterwards all the sickly portions of the trunk, until the bark is saturated, are well moistened with the prepared liquid, as are likewise the diseased parts of the roots that may be met with in such condition. It is estimated that about five liters are sufficient, and other five liters for irrigating in the vicinity of the tree. The hole is then filled up either with the burned earth or with new soil, and afterwards watered lightly.

Ten liters of this water saturated with sulphurous acid are more than sufficient for a tree somewhat grown, but practice will teach the greater or less quantity that should be employed.

RICHARD LOEWENSTEIN,
Consular Agent.

UNITED STATES CONSULAR AGENCY,
Grao of Valencia, June 30, 1883.

THE FORTH BRIDGE.

REPORT BY CONSUL LEONARD, OF LEITH.

In the course of a report from this consulate on the railway system of Scotland, published in No. 2, November, 1880, of Commercial Relations of the United States, a brief description was given of the scheme which had been devised for bridging the Firth of Forth at Queensferry, a seaport distant about 9 miles west from Leith, so as to complete the direct communication of the southeast and Waverly routes of the North British railway with Aberdeen and other parts in the north of Scotland.

To the late Sir Thomas Bouch, the engineer of the first railway bridge across the Firth of Tay, the credit was due of the proposition to cross the Firth of Forth by a gigantic suspension bridge in two spans of 1,600 feet each, thus avoiding the necessity of intermediate piers in unprecedented depths of water, with all the consequent uncertainties and contingencies.

But the disastrous fall of the Tay bridge influenced the directors of the Forth Bridge Company to have the whole plans of their bridge reconsidered, and ultimately the Forth bridge scheme as originally contemplated was abandoned.

After that design was abandoned, Messrs. Fowler and Baker, engineers, submitted a project for a bridge on the continuous girder principle. The requisite plans were deposited, and an act of Parliament was obtained for constructing a continuous girder bridge across the Firth of Forth from South to North Queensferry, the rail level being about that of the highest ground on either side (which may be almost termed cliffs, especially on the north side), and this level enables the headway of 150 feet from high water to rails at spring tides to be maintained on the bridge itself, as is required in order not to impede the navigation of the river.

The sources of economy in a continuous girder, as contrasted with a suspension bridge, are said to be, first, that the effective span of the opening is reduced; and secondly, that the mass of metal lies near the *piers,* where it acts with the shortest leverage, instead of near the center as in an independent girder. In an ordinary suspension bridge, with stiffening girder vertically to provide for the rolling load and horizontally to meet wind stresses, the mass of metal would be somewhat greater towards the center of the bridge than at the piers; and, consequently, for a given mass the movement would be much less in the continuous girder than in the suspension bridge. This consideration, coupled with the facts that suspension links are more costly than girder work, that a suspension bridge required a very costly anchorage, and that the contingencies and risks during erection in a stormy estuary are very great, explained why, in such a case as the Forth bridge, well designed continuous girders form a cheaper and far stiffer structure than a suspension bridge with stiffening girders.

A few months ago preliminary operations in connection with the building of the bridge were begun on both sides of the Forth, and the foundation stone was laid on June 7.

At Queensferry the separation of the shores of the Forth, or rather that of the piers next to the shores, at the elevation required for the railway, approaches to a mile. The total length of the bridge will be 1½ miles, of which half a mile is comprised in abutment arches, each end and intervening openings spanned by straight wrought-iron girders, 168 feet centers, supported on granite piers. The main structure, and that which will form the remarkable feature of the undertaking, spans two openings, each of 1,700 feet, and two side openings, each of 675 feet, and consists of braced trusses, curved on the under side, and forming half arches or spandrils over the water. These trusses are not supported, as is usual, at each end, but at the middle, which is also the point of greatest depth in the truss, being at this part 330 feet high above the piers. From the center they extend equally each way, the one side balancing the other.

The center truss rests on Inchgarvie, a small island situated about 1,700 feet from the northern shore of the Firth of Forth and about one-third of the whole distance across the Firth, and its extreme horizontal points are connected with the similar trusses north and south by girders of about 350 feet in length. The span from the center of the truss resting on Inchgarvie to the center of each of the other two trusses makes up the distances of 1,700 feet referred to. The total weight of the three trusses, which are all to be in steel, will be nearly 45,000 tons. The great height and length of the overhanging portion of the truss renders a large and stable surface necessary. This is secured by a cluster of four circular piers, strongly bound together by the superstructure. These piers will be of granite, each built by means of wrought-iron caissons, 70 feet in diameter, founded on the rock or sunk into the bowlder clay, the sinking and leveling being done by aid of compressed air within the caissons.

No special difficulty is expected to arise with regard to the foundations, though the works will necessarily be on an unusually large scale. The piers will be carried down at least 10 feet into the bowlder clay, which will give depths ranging from 68 feet to 88 feet below high water, and 18 feet less at low water in the respective cylinders.

In round numbers the weight of one of the cylindrical piers at Queensferry might be taken at 16,000 tons, and the combined vertical pressure on the top of the pier, from the dead weight of superstructure, rolling load, and wind pressure, at 8,000 tons; so, the load on the clay will average about 6 tons per square foot over the area of the foundation. That is an insignificant amount on such hard clay as that of the Forth, and the margin is ample, therefore, to allow of the unequal distribution of the pressure due to the action of partial blasts of wind, and of a certain amount of expansion in the tubes connecting the piers. The total length of the great continuous girder is 5,340 feet, or, say, a mile, and of the viaduct approaches 2,754 feet, or rather over half a mile. The piers will be of rubble masonry faced with granite, and the superstructure of iron lattice girders with buckled plate floor, and the rough rail bearers as in the instance of the main spans. The main girders, placed 16 feet apart, will be placed under the railway, and there will be a strong parapet and wind screen to protect the trains.

The structure is calculated to bear a strain of 2 tons per foot throughout, and a wind pressure of 56 pounds per foot.

The heaviest train traversing the bridge would not deflect the 1,700 feet girder more than 4 inches, whilst a wind pressure equivalent to 30 pounds per square foot over the entire 1,700 feet would bend the bridge less than 9 inches. The total quantity of masonry in the piers and foundations will be about 125,000 yards.

The board of trade engineers, Major-General Hutchinson, R. E., and Major Marindin, R. E., are to inspect the work as it proceeds every three months, in which provision there is great security for the quality of the work done.

Sir Thomas Selby Tancred, civil engineer, of London, and Messrs. William Arrol and Company, of the Dalmarnock Iron Works, Glasgow, have obtained the contract for building the bridge. The cost is estimated at $8,029,725, although that sum is considerably less than the Parliamentary estimate, and the connecting lines on each side of the Firth of Forth will bring the total cost of the undertaking up to $8,759,700. It is expected that the work will be finished in the course of five years.

It may be of interest to add that the Forth bridge will shorten the distance between Edinburgh and Perth and the north or northwest of Scotland by 17 miles. Further, when the Tay bridge is also completed (for which the reconstruction works are already commenced), the distance between Edinburgh, and, of course, London, also, and Montrose, Arbroath, Dundee, and Aberdeen, will be shortened by no less than 30 miles.

J. A. LEONARD,
Consul.

UNITED STATES CONSULATE,
Leith, *August* 17, 1883.

EXPORTS AND IMPORTS OF WINDSOR, ONTARIO.

REPORT BY CONSUL EWERS.

In this report of the business of this consulate, I have endeavored to simplify as much as possible, and at the same time clearly convey an intelligible general idea of the more important details of the workings of this office.

Breadstuffs are imported from the United States very extensively, the valuation of which for the past fiscal year was $218,001, or 33¼ per cent. of the entire amount of dutiable goods imported. *Coal* comes next on the list, the amount being $103,456, or a little over 15¾ per cent. of the total amount. *Wood* (and manufactures of) third, with a record of a trifle of 8¾ per cent. *Iron and steel* (and manufactures of) fourth, or 8½ per cent. *Provisions and meats* fifth, or 3¾ per cent. *Books, printed music*, &c.; *seeds; sugars, sirups*, and *molasses; fruits, oils, paper* (and manufactures of), and *vegetables*, the percentages being in the order mentioned.

Of the free goods imported *tobacco* (unmanufactured for excise purposes) heads the list, the valuation of which for the past fiscal year was $22,648, or about 19 per cent. of the total amount. *Drugs, dyes, chemicals*, and *medicines* come next, the amount being $11,002, or 9⅕ per cent., and *fish* third, or a little over 5¼ per cent.

The *crop* prospects in and about this district, as learned from reliable sources, are not as discouraging as one would naturally expect, considering the almost continuous rain of the past two months. The most important of the cereals, *fall wheat*, suffered serious damage from the severity of the past winter. The crop now promises about 78 per cent. of an average yield. *Spring wheat* is shown to be within 10 per cent. of an average crop. *Barley, oats*, and *pease* also promise about 90 per cent. of an average. *Rye*, 74 per cent. The *hay* crop, which is a most important one to Canada, instead of being about 10 per cent. below the average, as last season, promises this season almost 25 per cent. over the average, and in some sections the farmers expect more than a crop and a half as compared with an average year.

The total amount of declared exports from this consulate to the United States during the fiscal year ending June 30, 1883, was $408,087.55. Of this amount *animals* of all kinds constitute a trifle over 16⅘ per cent., being the largest amount in value of any one class of exports. *Malt* comes second on the list, showing a little over 13⅓ per cent. of the entire amount. *Fish* of all kinds third, with a record of a little less than 9¾ per cent., *logs* 8⅗ per cent.; *firewood*, 7⅗ per cent.; *charcoal*, 5⅙ per cent.; *railroad ties*, 4⅙ per cent.; *straw braid* and *hats*, 4½ per cent.; and *lumber*, 4½ per cent. The remaining 25 per cent. being made up of sundry other goods.

By the above rates of percentage it will be seen that *animals* constitute a very large and important class of exports from Canada to the United States, and I have watched the importation of this particular class with considerable interest. Since the recent decision of the United States Supreme Court (viz, that animals for breeding purposes, in order to be entered free of duty, must not necessarily be of a superior breed) has become generally known, it is extremely doubtful if such free importation in the great majority of cases results in any benefit to the American stock raiser, for nearly all mares are now entered as intended for such purposes, and the United States Government consequently derives no revenue therefrom. I know there are some mares of undoubted superior breed, exported expressly for breeding purposes, in the full acceptation of the term, and which improve the stock in the United States very materially, but the percentage is small.

In my opinion the law should be so amended as to impose a duty on *all animals*, whether entered as animals for breeding purposes or otherwise, except those of unquestionably superior breed.

No comparisons of any former business of this district can be intelligently given, as the Amherstburg consulate was an agency under this office until May, 1882.

CHARLES EWERS,
United States Consul.

UNITED STATES CONSULATE,
Windsor, Ontario, August 6, 1883.

COMMERCE OF RHEIMS WITH THE UNITED STATES.

REPORT BY CONSUL FRISBIE.

I have to represent a more favorable condition of the export trade from this consular district to the United States during the fiscal year just closed than has been enjoyed by those engaged in the American trade in any previous year, principally in champagne sparkling wine and in woolen fabrics, at least in so far as the records of this consulate show, being an increase of $1,577,525.21 over the fiscal year ending June 30, 1882, which had been considered a very satisfactory year, and giving an increase of several thousand dollars over any former corresponding period.

In regard to the matter of imports from the United States to this consular district, the condition is far from being as satisfactory to those who may wish to see reciprocal trade and a mutual interchange of commodities. In fact, the imports from the United States to Rheims are of such an insignificant character that they are not worthy of mention, except as a matter of comparison with the exports to the United States, enabling our manufacturers and merchants to see how largely the balance of trade is against them in this important section of France.

While the export of goods and merchandise to the United States from this district during the past year has amounted to the very respectable sum of $4,617,113.50, goods and merchandise of American manufacture are rarely, if ever, met with on sale in this market, with the exception of kerosene oil, canned meats, cove oysters, salmon, and lobsters, which may be generally found in most provision stores, the annual consumption of which can amount to but a few thousand dollars, as they do not enter into general use on French tables and in French economy.

The products of American industry coming from the loom and the mechanical arts are never met with in the stores of Rheims, so far as my observation and inquiry teach me, while goods of all kinds of English manufacture are kept on sale by every respectable merchant, and are largely purchased by consumers. The English merchant is always represented by his active agent in bringing his goods to the notice of the Rheims merchant and the public, and in cultivating the market. For this condition of American trade in this district the manufacturers and merchants of the United States are alone responsible. They have as yet made absolutely no effort to sell their goods here, and until they do, the people cannot be expected to purchase from them. In this age of competition he who runs swiftest will gain the prize, and he who does not start in the race cannot expect to share in the rewards.

Rheims is one of the important commercial centers of France, the oldest of the continental cities, having a population as enumerated by the latest official census of 93,823 inhabitants, possessing great wealth, and is fast extending her influence and importance in Northeastern and Eastern France, and the favor of its trade and commerce is well worth cultivating. What is needed here for the establishment of American reciprocal trade is a distinctive American house, conducted by American citizens, where may be found an extensive and general stock of American goods. I believe such a house would receive a large trade, not only from Rheims, but from the many cities and villages tributary *thereto.*

The American merchant cannot hope to secure the trade of a country the patronage of which he puts forth no effort to secure. Rheims merchants sell to the United States goods and merchandise to the value of about $4,600,000 annually, which is further augmented by Rheims woolen fabrics sold through commission houses at Paris to the annual value of four or five million dollars, while the American merchants sell comparatively little or nothing to Rheims. Why is this? It is because the Rheims merchants are represented either by branch houses which they have established, or by energetic, active agents in every important commercial center and city throughout the United States, while the American merchants have not taken the trouble to inform the people of Rheims and Eastern France that they have desirable and first-class goods to sell. The difference in result is only in direct ratio to the energy displayed.

In order to show the export trade of this district to the United States in the most explicit and comprehensive manner possible, I have thought it well for me to make a careful examination of each invoice declared and legalized at this consulate during the times mentioned, and to reduce the sums total, &c., into the following tabulated forms. This manner of presenting the subject has occasioned me an extraordinary amount of labor, but believing that the most comprehensive statement possible will be the better appreciated by commercial gentlemen and others interested, I have chosen this manner of submitting the same to the Department.

The following table is an exhibit of the declared export of champagne sparkling wine to the United States, in amount and value by each shipper, from the consular district of Rheims during the six months ending June 30, 1883:

Shippers.	Place of business.	Total number of cases shipped by each shipper.	Total shipments, computed in quart bottles.	Total value in United States gold coin.
G. H. Mumm & Co	Rheims	50, 969	611, 628	$547, 847 80
Kunkelmann & Co	do	23, 500	282, 000	273, 920 00
Werte & Co	do	23, 051	276, 612	364, 642 25
Pommery & Greno	do	20, 785	249, 420	362, 782 68
L. Roderer	do	12, 514	150, 168	165, 838 13
George Goulet & Co	do	6, 006	72, 072	69, 848 00
Bouché fils et Cie	Mareuil-sur-Marne	5, 056	60, 672	55, 472 66
Chandon & Co	Epernay	3, 858	46, 296	55, 787 40
Krug & Co	Rheims	3, 600	43, 200	40, 576 90
Delbeck & Co	do	3, 575	42, 900	37, 053 30
Jules Mumm & Co	do	2, 811	33, 732	33, 849 40
Heidsieck & Co	do	2, 610	31, 320	39, 700 00
Deutz & Geldemann	Ay	2, 145	25, 740	22, 732 74
Charles Heidsick	Rheims	2, 115	25, 380	18, 885 84
Runiart, père et fils	do	2, 082	24, 984	25, 652 80
A. de Montebello & Co	Mareuil-sur-Marne	1, 692	20, 304	22, 608 97
De Venoge & Co	Epernay	1, 236	14, 832	8, 055 00
Theophile Roederer & Co	Rheims	1, 150	13, 800	15, 548 40
Ayala & Co	Ay	1, 125	13, 500	14, 085 00
Ernest Ivroy & Co	Rheims	1, 046	12, 552	17, 422 00
Henriot & Co	do	1, 026	12, 312	10, 390 20
Gallici & Co	Epernay	1, 025	12, 300	14, 785 34
Geisler & Co	Avize	1, 000	12, 000	14, 563 80
Duming & Co	Ay	880	10, 560	11, 720 00
Arthur Roederer	Rheims	816	9, 792	18, 082 50
Bouvet, Ladubay & Co	Epernay	816	9, 792	6, 012 37
F. C. Jaunay	Rheims	800	9, 600	10, 883 20
J. Bollinger	Ay-Champagne	800	9, 600	10, 978 00
Dagouet et fils	Chalons-sur-Marne	785	9, 420	6, 375 00
Gustave Gibert	Rheims	645	7, 740	6, 906 60
Boll & Co	do	570	6, 840	7, 740 00

Shippers.	Place of business.	Total number of cases shipped by each shipper.	Total shipments, computed in quart bottles.	Total value in United States gold coin.
Canneaux et fils	Mareuil-sur-Ay	459	5,508	$4,974 99
Binet, fils et Cie	Rheims	450	5,400	5,102 57
Eugene Cliquot	do	385	4,620	2,019 50
Vix Bara	Avize	236	2,832	1,906 78
Bruch, Froucher & Co	Mareuil-sur-Ay	235	2,820	2,274 00
Carré & Barrau	Rheims	231	2,772	2,406 42
Faber fréres	Ay-Champagne	200	2,400	2,209 51
Perinet et fils	Rheims	182	2,184	2,162 37
Charles Loche	do	172	2,064	1,977 50
Paul Runiart & Co	do	152	1,824	2,066 94
J. Perrier, fils et Cie	Chalons-sur-Marne	150	1,800	900 00
Florent Hermans	Bordeaux	150	1,800	1,176 80
J. Champion	Rheims	139	1,668	1,064 20
Boshamer, Léon & Co	Bordeaux	125	1,500	2,228 77
Æ. Mahieu Quenardel	Rilly	125	1,500	900 00
Wachater & Co	Epernay	110	1,320	1,780 00
S. Verdelot & Co	Rheims	100	1,200	1,140 00
B. & E. Perrier	Chalons-sur-Marne	100	1,200	826 00
Jules Fournier	Epernay	100	1,200	420 00
Ch. de Rutté	Bordeaux	80	960	1,457 55
A. Marizet	Rheims	75	900	420 00
E. Merciere & Co	Epernay	61	732	1,069 20
Chausson frères	do	50	600	614 20
Adolph Collin	Chalons-sur-Marne	50	600	400 00
Pierre Bernard	Epernay	40	480	280 00
Charles Vienot	Bordeaux	36	432	340 68
Freminet et fils	Chalons-sur-Marne	30	360	378 00
A. Moreau	Rheims	26	312	214 56
Henry Eckel & Tafel	Epernay	25	300	137 37
G. Preller & Co	Bordeaux	3	36	65 60
A. Arnold	Rheims	1	12	12 00
De St. Marceaux & Co	do	505	6,060	6,685 60
Total		184,872	2,218,464	2,360,357 30
Total for six months ending June 30, 1882		119,622	1,435,464	1,468,325 64
Increase		65,250	783,000	892,031 66

The following table is an exhibit of the export of champagne sparkling wine from the consular district of Rheims to each port in the United States at which such wines were entered for the first six months of 1883 (as specifically stated in the foregoing table):

Port.	Total number of cases.	Total shipments, computed in quart bottles.	Total value in United States gold.
New York	155,568	1,866,816	$1,954,370 03
San Francisco	10,212	122,544	130,825 86
Boston	10,837	130,044	158,678 11
Philadelphia	4,338	52,056	60,756 63
New Orleans	2,625	31,500	33,690 95
Chicago	370	4,440	4,412 90
Milwaukee	300	3,600	3,948 00
Louisville	40	480	573 40
Portland, Oregon	100	1,200	826 00
Cincinnati	50	600	571 97
Baltimore	160	1,920	1,825 00
Pittsburgh	84	1,008	793 76
Buffalo	26	312	343 20
St. Louis	150	1,800	3,599 00
Providence	12	144	152 50
Total	184,872	2,218,464	$2,360,357 30

The following table is an exhibit of the total export of champagne sparkling wine from the consular district of Rheims to each port of the United States for the fiscal year ending June 30, 1883:

Port.	Total number of cases.	Total shipments, computed in quart bottles.	Total value in United States gold coin.
New York	289, 224	3, 470, 688	$3, 538, 972 52
Boston	20, 790	249, 480	297, 693 63
San Francisco	14, 766	177, 192	188, 227 41
Philadelphia	8, 115	97, 380	113, 624 80
New Orleans	7, 454	89, 448	99, 382 92
Chicago	945	11, 340	11, 332 51
Milwaukee	450	5, 400	5, 916 00
Saint Louis	207	2, 484	4, 407 89
Baltimore	210	2, 520	2, 400 00
Louisville	95	1, 140	1, 227 40
Portland, Oreg	100	1, 200	826 00
Cincinnati	75	900	973 92
Buffalo	76	912	987 60
Pittsburgh	84	1, 008	793 75
Cleveland	66	792	913 00
Savannah	55	660	544 50
Providence	12	144	152 50
Total	342, 724	4, 112, 688	4,268, 176 35
Total for fiscal year ending June 30, 1882	250, 961	3, 011, 532	2, 978, 526 34
Increase	91, 763	1, 101, 156	1, 289, 650 01

While the records show an increase in the shipments of champagne sparkling wine to the United States of 91,763 cases (1,101,156 quarts) for the fiscal year ending June 30, 1883, I estimate that about 25,000 cases were shipped in excess of the demand for consumption during the months of April and May, from a desire of the shippers to have their wine entered before the first day of July, in order to save the advance in duties imposed by the new tariff to take effect on that date, so that the legitimate increase arising from requirements for immediate use were but 76,763 cases (921,156 quarts), which, however, must be considered a very large increase and most satisfactory showing for the business of the year.

The following table is an exhibit of the total declared value of the woolen goods exported from this district for the fiscal year ending June 30, 1883:

Port.	Shippers.	Consignees.	Value in U. S. gold.
New York	Dauphinot & Martin	Wilmerding Hoguet & Co	$115, 373 83
New York	Mennesson & Co	do	124, 172 79
New York	Warnier & David	Sylvester Hilton & Bros	11, 299 12
New York	do	McLea, Austin & Wellington	4, 545 61
Total			255, 391 35

Although the records of this consulate show but $255,391.35 in value of woolen goods of Rheims manufacture sent to the United States during the year, the real value of such goods is supposed to be in the neighborhood of $4,000,000, sold through commission houses at Paris. I made an attempt to have the invoices of such goods presented at this consulate for legalization in accordance with the instructions contained in Department circular dated June 20, 1881, but without success, and I shall probably meet with no success in that direction so long as my colleagues continue to accept and verify the invoices.

The following table is an exhibit of the total export from this consular district to the United States as shown by the invoices for the fiscal year ending June 30, 1883:

	Value in U. S. gold.
Champagne	$4,268,176 35
Dress goods (woolen)	255,391 35
Willow, raw and manufactured	58,976 70
Machinery	9,289 45
Miscellaneous	5,029 92
Dress trimmings	5,949 79
Corsets	2,796 64
Corks	2,942 40
Hats and hatters' goods	1,441 57
Dye stuffs	3,647 28
Preserved fruits and vegetables	1,754 82
Sirups	1,038 48
Dessert wine	678 75
Total	4,617,113 50
Total for fiscal year ending June 30, 1882	3,039,588 29
Increase	1,577,525 21

The condition of trade generally has somewhat improved since the beginning of the year, but it still remains stringent and unsatisfactory. The woolen mills are all in active operation again, but conducted with greater caution than in times when trade is buoyant and active. Labor quite generally finds employment, but at distressingly low wages. But few idlers are now noticed on the streets.

The prospect for an abundant and high-class vintage is now most encouraging, and if the weather shall continue favorable, the vintage harvest for 1883 will rank among the really good vintages of former years, and which, owing to the seven rather poor years last past, is now very desirable and necessary for replenishing the stock of fine wines.

JOHN L. FRISBIE,
Consul.

UNITED STATES CONSULATE,
Rheims, *France*, *July* 3, 1883.

THE RAW SILK INDUSTRY OF ITALY.

REPORT BY CONSUL CRAIN, OF MILAN.

The exportation of raw silk from Milan to the United States is notably increasing, as will be seen by the following figures, giving the declared value for each year ending September 30, since 1879:

1880	$407,690 81
1881	489,043 86
1882	1,265,774 36
Nine months ending June 30, 1883	1,440,042 27

This increase is proof that American manufacturers and dealers have *found* it to their interest to establish direct relations with the leading raw silk market of Europe. A considerable quantity of Italian raw silk is still sent to our country by French, Swiss, and English houses, whose invoices are verified at consulates outside of Italy, but American buyers are beginning to realize the advantage of direct purchases, and it is believed these indirect shipments will diminish.

The raw silk production of the world was estimated by the Economista d'Italia, a few years ago, as follows:

	Kilograms.
Italy	3,125,900
China	3,105,000
France	636,000
Bengal	594,000
Japan	508,000
Spain	171,400
Georgia, Persia, and Khorassan	110,000
Syria	107,500
Broussa	77,000
Volo and Salonica	83,300

As regards Europe it is thus seen that the supremacy of Italy in this industry is undisputed. Lombardy produces about 1,200,000 kilograms of raw silk, and contains about 450 spinning mills. In addition to the home production, there is yearly imported into Italy about 200,000 kilograms of European and about 100,000 kilograms of Asiatic raw silk which is converted into tram and organzine. The value of raw silk annually sold in the Milan market is stated at 200,000,000 francs. The Casa di Risparmio of Milan is authorized by its charter to loan upon this article as a collateral, and large quantities of it are stored in the building of that institution.

Unusual interest has been shown in the progress of the cocoon harvest just finished. The yield is about the same as that of last year.

Notwithstanding the short crops in China, France, and Spain, the prices realized for cocoons in the Italian market is from one-sixth to one-fourth less than last year.

The following tables will be of interest to those connected with the silk industry:

Silk conditioned in Milan during the first and second semesters of the silk year 1882-'83.

Months.	Greggie.		Tram		Organzine.	
	Bales.	Kilograms.	Bales.	Kilograms.	Bales.	Kilograms.
1882.						
July	1,477	115,193	395	35,310	777	70,413
August	1,707	130,040	558	49,560	993	87,920
September	1,862	148,595	603	53,115	1,090	97,435
October	1,823	149,300	630	56,860	1,066	97,300
November	1,621	130,160	588	51,870	907	81,405
December	1,745	146,015	581	50,725	981	87,015
1883.						
January	1,565	126,770	668	58,960	913	81,660
February	1,368	112,525	604	54,790	928	81,330
March	1,580	132,910	659	59,375	993	90,450
April	1,114	119,195	681	60,475	915	85,130
May	1,460	125,540	741	66,020	996	90,510
June	1,515	134,735	708	63,195	1,071	98,840
Total	19,167	1,571,040	7,119	660,255	11,063	1,052,410

Silk conditioned in Milan the first and second semesters of the silk year 1882–'83.—Continued.

Months.	D. 1 Greggie.		Sewing.		Total.	
	Bales.	Kilograms.	Bales.	Kilograms.	Bales.	Kilograms.
1882.						
July	46	3, 885	40	2, 430	2, 735	227, 235
August	40	2, 930	31	2, 110	3, 332	272, 660
September	31	2, 155	53	3, 145	3, 639	304, 445
October	20	1, 470	38	2, 435	3, 577	307, 365
November	46	4, 010	38	2, 460	3, 200	269, 905
December	13	1, 055	39	2, 690	3, 361	287, 560
1883.						
January	24	2, 093	43	2, 855	3, 213	272, 340
February	38	2, 980	30	2, 030	2, 968	256, 655
March	22	1, 720	39	2, 663	3, 293	287, 150
April	28	2, 790	41	2, 610	3, 109	270, 200
May	35	3, 100	41	3, 140	3, 279	288, 310
June	29	2, 525	51	3, 563	3, 110	302, 860
Total	374	30, 715	493	32, 433	39, 116	3, 346, 885

Movement of the conditioning house in Milan during the last ten years.

Months.	1873–'74.	1874–'75.	1875–'76.	1876–'77.	1877–'78.
July	161, 510	197, 195	234, 045	481, 330	135, 840
August	183, 760	226, 420	283, 275	455, 520	155, 575
September	233, 595	242, 570	293, 270	353, 855	174, 580
October	250, 310	277, 940	282, 915	324, 365	263, 200
November	209, 555	222, 890	274, 905	160, 350	365, 790
December	214, 080	249, 035	274, 265	205, 185	237, 870
January	204, 450	245, 310	275, 180	137, 950	147, 530
February	205, 105	193, 710	266, 185	107, 345	144, 445
March	261, 680	247, 820	317, 370	147, 225	198, 170
April	173, 460	255, 610	251, 440	106, 765	193, 595
May	192, 960	262, 815	358, 805	159, 130	260, 270
June	149, 870	247, 885	286, 910	114, 490	176, 605
Total	2, 440, 335	2, 869, 250	3, 400, 565	2, 653, 010	2, 448, 830

Months.	1878–'79.	1879–'80.	1880–'81.	1881–'82.	1882–'83.
July	209, 665	135, 185	191, 700	224, 355	227, 235
August	231, 250	167, 855	262, 720	325, 820	272, 660
September	230, 630	167, 370	262, 370	391, 675	304, 445
October	245, 895	228, 525	255, 150	429, 985	307, 365
November	245, 265	256, 700	264, 460	395, 915	269, 905
December	196, 370	280, 285	244, 240	456, 837	287, 560
January	206, 125	225, 335	260, 170	275, 720	272, 340
February	186, 635	211, 555	275, 985	251, 050	256, 605
March	238, 115	278, 835	321, 230	291, 185	287, 150
April	290, 095	202, 130	240, 560	219, 080	270, 200
May	383, 295	217, 645	242, 980	340, 575	288, 310
June	240, 000	231, 560	230, 885	190, 480	302, 860
Total	2, 903, 340	2, 603, 980	3, 052, 430	3, 822, 627	3, 346, 885

Prices realized for different qualities of silk in the Milan market at the following dates.

Quality.	December 31, 1882.				June 30, 1883.			
	16-20.	18-22.	20-24.	22-26.	16-20.	18-22.	20-24.	22-26.
ORGANZINES.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Classical	69	68	66	65	65	63	62	62
Sublime	66	65	64	63	63	61	60	59
Bellissimi	65	64	63	62	60	59	58	58
Good average	64	62	61	60	58	57	57	56
TRAM.								
Classical	....	....	64	63	....	....	62	60
Sublime	....	....	62	61	....	....	59	58
Bellissimi	....	....	61	60	....	....	58	57
Good average	....	....	60	59	....	....	57	56
Quality.	8-10.	9-11.	10-12.	11-13.	8-10.	9-11.	10-12.	11-13.
GRÈGE.								
Classical	58	57	55	55	55	54	53	53
Sublime	57	56	54	54	53	52	52	51
Bellissimi	56	55	53	53	52	51	50	50
Good average	54	53	52	51	51	50	50	49

From the above it will be seen there has been an average decline of about 3 francs on each grade since December, 1882.

I deem it proper to remark that a very encouraging view of the future of the Italian silk industry is now taken. The results of the Pasteur system for the eradication of the silk-worm disease have been highly important, and the importation of Japanese silk-worm eggs has practically ceased. The yellow or native breed is being rapidly brought to a condition of health and vigor, and the increase in the quantity of silk produced will be proportioned to the increased employment of that breed.

DUNHAM J. CRAIN,
Consul.

UNITED STATES CONSULATE,
Milan, July 21, 1883.

TRADE AND COMMERCE OF LA PAZ, LOWER CALIFORNIA.

REPORT BY CONSUL VIOSCA.

Various are the reasons assigned for the present decline of business throughout this peninsula, principally those which produced the stagnation after the ending of the revolution headed by General Marquez in 1879. For three years prior to the improperly-called political movement, which was nothing else than a mob, rains had been very scarce and the country so dry that thousands of cattle were lost—cattle-raising being the most important following of life here, and also one of the most interesting items towards assisting the trade and commerce of this country.

With all the above elements combined against the prosperity and welfare of this territory, considering its scanty population, the lack of special protective laws from the Government, and the isolated geographical situation of the peninsula from the adjacent states, the commerce of the port of La Paz, confined to three municipal districts—La Paz, Triunfo, and Santiago—has done wonderfully well.

The present ending season for pearl-diving has been very prosperous. Three pearls of special note have been obtained by the following divers:

One pearl of light brownish color and of dark shading, weighing 65 carats, the estimated value being $8,000, was found by Manuel Urbano, bought and sent to Paris by Messrs. Gonzalez & Ruffo.

One pearl of pear shape, and natural pearl color with some dark specks, weighing 44 carats, the estimated value being $7,500, was found by Napoleon Savin, bought and sent to Paris by Messrs. Pablo, Hidalgo & Co.

One pearl of oval shape, light sandy color, perfect and very brilliant, weighing 32 carats, the estimated value being $5,500, was found by Enrique Savin, bought and sent to Paris by Messrs. Pablo, Hidalgo & Co.

Pearl-fishing is one of the most important branches of territorial industry, supporting nearly one-quarter of the inhabitants. By an act of the Government of Mexico, the sole right of fishery has lately been transferred for ten years in favor of two or three monopolizers, merchants of this city, with grave injustice to thousands of divers employed in the trade, whose only means of subsistence is that very perilous toil.

The aforesaid act is contrary to the meaning of the existing law, which declares the freedom of the mentioned fishery throughout the littoral of the sea bordering the coasts of Mexico, and also contrary to the treaty stipulations with the United States of America. Herewith I beg to transmit the private contract published in the Diario Oficial, as per inclosure No. 2.

Orchilla weed has become a very interesting product exported from the ports of entry of Magdalena Bay; the said weed is collected on the lands bordering the northern portion of the Pacific side of this territory. Although said article is taxed at the enormous rate of $10 per ton, and the collecting, packing, and shipping expenses very excessive, the returns for the sales in Europe show quite a handsome profit. Unfortunately for the good of the country, the orchilla land grants are almost all involved in lawsuits.

No one having the least knowledge of this country can doubt of its barrenness, and also that the general aspect of the Gulf coast produces a very unfavorable impression on the traveler, but, aside from the benefits of its healthy climate usually enjoyed here, there are a great many land spots which are susceptible of producing largely.

Artesian wells could make the greater portion of this land productive. Many extensive and fertile valleys lie idle for the want of water; which valleys, by the aid and force of industry, would become valuable property. The San José, Santiago, and the Oro valleys have been turned of late into cotton plantations with very lucrative results. The mineral wealth of this peninsula has proved to be a reality; the ore ledges are very wide and abundant of ores. At present only a few of the mines are worked on a very small scale.

To insure the progress of Mexico, the continuation of peace is to be desired, but unless more liberal laws are enacted than those now existing, or at least laws adapted to the necessities for opening its material resources, very little hope remains for American or other foreign capital and labor to make an early venture towards developing this peninsula.

Mining will be the subject of my next report.

JAS. VIOSCA,
Consul.

UNITED STATES CONSULATE,
La Paz, Lower California, Mexico.

VITICULTURE AND THE BLACK HAND IN WESTERN ANDALUSIA.

REPORT BY CONSUL OPPENHEIM, OF CADIZ.

During the past six months the shipments of sherry wines to various markets have shown but little variation as compared with that of the same period last year; the only exception being the largely increased exportation to the United States, stimulated beyond doubt by the approaching change in the tariff, purchasers being anxious to bond their goods before the first of July next, from which date the 50 cents per gallon duty comes into operation. This alteration in the tariff will, it is feared, affect the future demand for low-grade sherries prejudicially, but it is not thought that the steadily increasing consumption of the finer descriptions of wine will be materially interfered with.

Since my last October report, it has been possible to determine the quality of last year's vintage, which in quantity was one of the shortest on record. The result has proved unsatisfactory, a considerable portion of the yield being deficient in saccharine and consequently lacking body; the balance can be classified as of fair average merit.

As regards this year's vintage, the prospects may be said to be very favorable. The vines look healthy and vigorous, and appear to have recovered in a great measure from the effects of the severe March frosts from which such evil results were apprehended. Should the weather between now and September continue favorable, a fair medium yield is anticipated; a plentiful vintage cannot, however, under any circumstances be looked forward to, owing to the stunting effects of last year's drought on the growth of the plants. Another reason why the large yield made in former years cannot be looked for now is the fact that a number of vineyards have been practically abandoned by their proprietors, many of whom maintain that the expense of cultivation under the terms at present exacted by the vineyard laborers is in excess of the average return from the land. The cost of cultivation of the Jerez vineyards may be roughly estimated at from $60 to $70 per acre. This heavy outlay is chiefly due to the conditions imposed by the laborers; the wages usually paid are not in themselves exorbitant, being from 60 cents to 70 cents per day; the work is, however, carried on under conditions most onerous for the employer, and which probably make vineyard labor here dearer than similar labor anywhere else in Europe; thus, three hours for meals are granted the laborer each day; two hours more are allowed for "smoking," those two hours being usually divided into from 6 to 8 spells of about 15 to 20 minutes each. The nature of viticultural operations requires that laborers should be generally engaged for short periods only, ranging usually from a week to a fortnight; the day of engagement and the day of dismissal, on neither of which they ever do more than a mere fraction of a day's work, have to be paid as full working days. This state of things dates from a period of great prosperity, when the liberal demand and the prices obtained for wines were such as to justify some carelessness as to the cost of production. Times have greatly changed; the market for sherries has become a more restricted one, and what is sold brings lower prices, yet the vineyard laborer insists on the same terms as were granted in the flush times of the past.

This year's cereal crops throughout Andalusia will, it is thought, prove to be the heaviest gathered for many years, thus tending, in some measure, to recoup the farmers for the almost total failure of last season. These crops are now in process of being harvested, and there has been experienced some difficulty in obtaining a sufficiency of harvest hands. These harvest operations have now for many years been performed by gangs of Portuguese laborers, who come across the frontier for the purpose, making contracts with the farmers at so much per acre, and returning to their homes when the harvest has closed. On the arrival of these bands this year they resolutely refused to work except for daily wages and at exorbitant rates, the reason given being that they were intimidated by members of the "Mano Negra" (Black Hand) secret association, and that their acceptance of any other terms would endanger their lives. The Government being appealed to, furloughed a number of soldiers for the purpose of allowing them to engage in harvest operations, and this has apparently relieved the situation; about 2,000 soldiers have actually gone to work, and the Portuguese, alarmed at this unlooked-for competition, are rapidly coming to terms.

The "Mano Negra" association, above referred to, has been treated *ad nauseam* by the press of both hemispheres, yet nothing that can be called conclusive has as yet been brought forth respecting the inception and aims of the association. The employer and land-holding class say that it is a socialistic organization, whose aim is to war against capital; the laboring classes and their organs, on the other hand, claim that it is simply a sort of trades-union association, whose only purposes are a betterment of the economical condition of the members by co-operation and other legal means. Plenty of advocates can be found for either view, and whilst from what has come to light in some of the late trials it appears that the decrees of some local "head centers" have been obeyed even to the length of assassination, yet proof is wanting that private feuds or revenge do not fully account for every deed of violence thus far committed. Agrarian outrages, properly so called, have been very rare, and even ordinary crimes against property have been no more frequent than might be expected from a somewhat lawless peasantry in times of great dearth. These views seem to find confirmation in the fact that in the recent murder trials the victims were shown, with hardly a single exception, to have belonged to the laboring class.

Economically, the effect of the "Mano Negra" excitement thus far has been nil, but there was growing up amongst property holders and employers generally a sense of insecurity which, if it had not been checked, would certainly have made sad havoc with the agricultural interests of this district. It is gratifying to be able to state that, thanks to the well-directed efforts of the civil and military authorities and of a most efficient gendarmerie, this feeling of apprehension has been in a great measure allayed, and the people now look forward to quieter times.

ERNEST L. OPPENHEIM,
Consul.

UNITED STATES CONSULATE,
Cadiz, *June* 18, 1883.

THE SILK HARVEST IN FRANCE.

REPORTED BY CONSUL PEIXOTTO, OF LYONS.

I beg to present the following report on the French silk harvest for 1883:

The breeding of silkworms was delayed this year on account of the cold weather which prevailed at the close of March. In some localities mulberry buds were frost bitten, which fact produced two drawbacks to the *récolte*:

1st. Thowing away of a certain number of worms.

2d. Increased price of leaves from 8 to 10 francs the 100 kilograms.

Later, when the warm weather arrived, vegetation was too rapidly accelerated, and the price of leaves fell to 5 and 6 francs the quintal métrique, and at the close of the season considerable quantities of the leaves remained on the trees.

The native seed brought from 10 to 12 francs the ounce of 25 grams.

At the moment of incubation Cevenes silk of Lyons condition was worth 62 to 63 francs the kilogram; consequently, in view of the fact that the price of cocoons would not sufficiently remunerate for the raising of the worms, a number of great proprietors abstained from breeding.

The progress of the silkworms after the third stage was favored by fine weather and a genial temperature, but on approaching the fourth mue the atmosphere became humid, rain fell in many sections, and a certain number of cases of *flacherie* appeared among the breeding worms; the *gattine* and the *muscardine* also caused damage. Finally, however, though inferior to that of 1882, from the reasons above cited, the crop of this year has been fairly good.

From all the reports which are now in, the silk crop of 1883, for France, may be estimated at 9,000,000 kilograms of cocoons, which (at one kilogram of raw silk to twelve of cocoons) would be a yield of 750,000 kilograms of raw silk, or at present prices (say 60 francs the kilogram) a value in money of 45,000,000 of francs, or $8,685,000.

Cocoons in general are of good quality, and yet, since 1848, prices have not been as low as during the present season.

In the department of the Vaucluse they commenced at 3.50 francs and rose to 3.80 francs the kilogram.

In the Ardeche they have brought 3.80 to 4 francs. In the Cevenes on the 11th of June, at Alais, they sold for 4 francs. On the 14th at Anduze, at 4.15 francs. On the 18th at Saint-Ambroix and Alais 4.20 to 4.25 francs, and at Saint-Hippolyte the average price has been 4.20 francs the kilogram. These low prices are not such as to encourage breeders of silkworms. And yet, now that silk culture is in possession of the best methods for the production and preservation of eggs; now that the diseases of the silkworm are perfectly well understood, combated, and vanquished; now that sanitary measures are practiced by the largest part of breeders, and the yield in general is superior to the periods previous to the *epizootic*, it is impossible to believe that this splendid industry is to be abandoned because of the temporary caprice of fashion or the neglect of the pure article of silk for the hybrid and mongrel mixtures prevailing for some years. In fact, the diminished production of silk, owing to repeated bad seasons, is certain to revive the demand for this marvelous textile. The fickle goddess, if capricious in one respect is equally so in another; she is, after all, but the feeble though arbitrary reflection of humanity. When she has plenty she neglects the bounty of nature and turns to baser things.

China this year has been severely struck in her silk crop, her yield falling behind nearly one-half. Is this large deficiency owing to disease in her corpuscles; and, if so, will not the malady aggravate? And may not the condition there so change in the more careful rearing of worms that the raw silks of the Celestial Empire may no longer be produced at the low prices of the past? On the other hand, fashion may soon change again and once more demand tissues made only from the pure and classic article.

These are a few of the considerations, it would seem to me, sericulturists, and especially those of France, should bear in mind, and not through discouragement abandon so great an industry.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, August 2, 1883.

GERMAN ANILINES.

REPORT BY CONSUL BALLOW, OF KEHL.

The discovery of mauvine, the first aniline color, in 1856, which was followed shortly after by the still more important discovery of aniline red, laid the foundation for this now very important industry of Germany, and has furnished means to accomplish one of the greatest triumphs of organic chemistry.

The present state of perfection which this branch of chemical industry has reached, and the lively progress with which it still continues, is due to the arduous labor of German chemists; and Germany still reaps the benefits of their labors in a most substantial way. For instance, one of the largest establishments for making these colors, situated in Baden, but a short time since declared a dividend of 30 per cent. on one year's business, and this, too, after placing a considerable sum in the sinking-fund, as is their annual custom, this money being used in establishing branches whenever advantageous opportunities offer. The above-mentioned dividend is by no means extraordinary, as for the past five years they have been equally large, and their actual profit in two years on alizarine alone was over $2,000,000.

Now, there is no reason why this could not be done in the United States as well as here.

I am satisfied that competent people could be procured, and all that is then necessary is the required capital to furnish buildings and material; sooner or later this will be done in the United States, and the parties directly interested in Germany fear this, for they well understand the immense advantage we would have geographically as regards China and other parts where great quantities of aniline are used; and I am reliably informed that one of the extensive companies in Germany has perfected arrangements for establishing business in the United States as soon as competition there becomes a fact. This proves that it can be accomplished in the United States, and an accurate comparison here of the supply and production of raw material with the amount of coal consumed and "gassed" in different countries, so as to show in what proportions we allow crude material (coal tar) to go to *waste* in the United States, is considered of interest to American capitalists and chemists.

The amount of coal produced in the following countries was for the given years:

	Tons.
Great Britain, 1879	163,000,000
Germany, 1878	52,031,726
France, 1878	17,096,563
Belgium, 1877	13,936,523
Australia, 1876	1,880,000
Canada, 1876	709,646
United States	75,000,000 to 100,000,000

The production for the whole world is yearly about 350,000,000 tons. About 6 per cent. of the whole amount of coal produced, at least in the civilized countries, is used for the production of gas.

The United States uses more gas proportionately than any other country except England, hence the amount of coal that is "gassed" will probably exceed 6 per cent., at least if the amount of coal-tar that is allowed to go to waste from our coke-works is considered.

The amount of coal-tar which is practically *wasted* by our coke furnaces is something enormous. In 1880 Pennsylvania produced 84.5 per cent. of the 2,752,475 tons of coke which the United States produced, showing that if condensers were put on our coke furnaces the tar produced would be geographically centered around one point, viz, Pittsburgh, and accessible for manufacturing purposes with scarcely any freight.

Coke furnaces with condensers produce 4 per cent. of tar and 9 per cent. of ammonia water; hence from this source alone we could derive yearly—

	Tons.
Tar	110,099
Ammonia water	247,723

The average amount of coal-tar which a ton of coal produces in the gas factories is here accurately given from the yearly average production of the Berlin gas factory. One ton of Schleswig coal produces—

Gas	cubic meters..	276.7
Coke	pounds..	1,254
Small coke	do....	34
Tar	do....	96
Ammonia water	do....	186

The above figures show that the United States consume yearly about 4,500,000 tons of all coal that is mined for gas, and this produces over 180,000 tons of coal-tar.

The whole world produces yearly about 600,000 tons of coal-tar, and 285,000 tons are, according to the best estimates, used for the production of raw materials for the color works. England distills yearly 475,000 tons of tar; France, 50,000 tons; Germany, 37,500 tons; United States, a very small amount.

The color factories consume large quantities of raw materials, which of course cannot be produced on the spot, and the cost of freight for sending crude tar from the smaller gas-works in the country towns would be too great, as will be seen below; hence nearly all gas factories distill their own tar.

The operation is simple, requiring only a good distilling kettle of the requisite capacity; further, it does not require professional management, as a good workman soon learns to operate the whole affair properly. There is in Kehl an establishment of this kind very complete in its arrangements, in which the coal from the Strasburg gas company and surrounding places is distilled.

The operation is as follows: The still is gradually heated, and the first that passes over, first runnings, is caught separately, and is that part of the distillate which has a specific gravity of not over 0.85; it contains some ammonia water, and consists principally of benzole and its homologues, and amounts to from 2 per cent. to 4 per cent. of the tar.

The receiver is next changed when the distillate begins to sink in water. This portion, light oil, has a specific gravity of from 0.8 to 0.9, contains principally benzole and homologues, and is from 7 per cent. to 8 per cent. of the tar.

After the distillate begins to sink under water the receiver is next changed, and the portion distilling over between 210° and 400° is caught separately as heavy oil. In the first part of this distillate the naphthaline is contained, and is crystallized out on cooling. Then come phenols and creasols, and at last the so-called "green grease," which consists principally of anthracine. The whole amount of heavy oil is about 37 per cent. of the crude tar. The larger portion which remains in the retort is pitch, and sold as such after being first made into brignettes, which are much used in Europe for heating purposes.

I am not informed whether these are now made in the United States, but think not, as the production of these brignettes is a result of the process just described. They are made in large quantities throughout Germany and largely in this district. They are extensively used, being quite cheap; 100 pounds can be purchased for 23 cents.

Europe produces yearly 2,500,000 brignettes. Making an average on the amount of the different distillates and residues obtained by the distillation of coal-tar, gives from one ton of tar:

	Pounds.
Ammonia water	20 to 30
First runs	40 to 80
Light oil	140 to 160
Heavy oil	640 to 700
Green grease	200 to 224
Pitch	1,000 to 1,100

By the simple distillation the tar is greatly reduced in bulk to several and all very salable products, all of which goes to the aniline factories except the ammonia water and pitch. Further, when the purification of these several distillates is completed at the aniline factories, the per cent. of pure material is still further reduced. The following is an accurate average of the pure products from the Berlin gas company's tar. One hundred pounds crude tar yield:

	Pounds.
Benzol and tolmol	0.80
Carbolic acid	0.60
Creosote (for disinfection)	0.30
Naphthaline	3.70
Anthracine (pure)	0.20

Some of the larger gas companies purify the first distillates, while some sell their crude tar. Of course these exceptions are caused by the situation of the gas factory and its distance from an aniline factory.

In Germany the price varies somewhat. In Berlin the average price s 50 cents per 100 pounds for crude tar. The higher boiling portion of the light oil, consisting mainly of xylene and cynolene, is very much used in the preparation of varnishes, lacs, &c., and is a splendid solvent of copal, &c.

The crude creosote oil, obtained by the purification of the heavy oil, s much used in Europe for impregnating railroad and telegraph poles, &c., and with very good success. The daily production of aniline amiolobenzol) is in—

	Pounds.
Germany	20,000
France	6,000
England	3,000
United States	1,000

It is also a fact that the bulk of the benzine and toluene derivatives, such as aniline and toluidine, used in the United States for color-making, is imported. Amiolobenzol and poluodine are the commencement material for a whole series of colors, viz, aniline red, violet, blue, &c. Pure poluol is at present much used in the preparation of artificial indigo.

The artificial preparation of this important color was discovered by Professor Baeyer, 1880. The "Badische Anilin- und Soda-Fabrik," who hold the patents on the artificial preparation of indigo, are at present producing large quantities of orthonitrophenyl-propiolic acid, which they sell and which is mixed with xanthogenate and printed on cloth, then by the action of oxidizing agents changed into indigo; it makes a very fine and natural indigo color, but the price is still very high. The present outlook is that the artificial will not replace the natural product; however, the above-named company is now manufacturing several hundred pounds of the orthonitrophenyl-propiolic acid every day, and the near future may make it an immense source of revenue, as artificial alizarine is at present. The artificial preparation of alizarine from anthracine, the important coloring principle of madder, was discovered by Graebe and Liebermann in 1868, and in less than a decade it had replaced the natural color, and is now used exclusively for the production of madder color, being better and cheaper.

The great revolution in the price and production of alizarine and madder, caused by this most important discovery, is shown in the following figures.

It is necessary to add here that alizarine comes on the market in the form of a paste of a certain strength.

The price of alizarine paste was on an average in 1870, for 10 per cent. paste, $1.70 per pound; 1882, for 20 per cent. paste, $0.70 per pound; at present there are 15 alizarine factories in existence: 8 in Germany, 3 in Russia, 2 in Switzerland, 1 in France, 1 in England. These factories manufacture on an average 35 tons of 10 per cent. paste per day, or $10,000,000 worth per year. For the production of this enormous amount of alizarine 1,050 tons of pure anthhracine are required. England is the greatest consumer of the finished product, but Germany produces 91 per cent. of all that is made.

The following figures show the great depression which the natural product has experienced since the artificial mode of preparation was discovered. In the province of Vaucluse and bordering provinces, the principal madder districts of France, was grown, in 1863, 26,850 tons of madder; 1873, 22,850 tons of madder; 1878, 500 tons of madder; 1883, madder not grown; the price falling from $7 to $8 per 100 pounds in 1863 to $1.50 to $2 for the same quantity in 1878. The import of madder into England was, in 1868, 15,294 tons; 1878, 1,649 tons. The price fell from $250 per ton in 1868 to $90 per ton in 1878. The yearly production of aniline colors amounts in round numbers to $25,000,000, from which the United States derives but little benefit.

The Chinese consume large quantities of these colors and they are totally supplied from Europe, although the United States have the geographical advantage with an almost unlimited supply of crude material.

The United States imported from Europe for her own use in the fiscal year 1880–'81, 809,225 pounds of aniline colors and 898,539 pounds of alizarine paste, the entrance duty on the same being $1,300,000. There are 9 extensive distilleries and 29 color works in Germany. An idea of the extensiveness of some of these factories can be shown from the following statistics on two of the larger factories in Germany. The "BadischeAnilin und Soda-Fabrik" in Ludwigshafen, has an extensive branch at Stuttgart, one in France, at Neuville, one in Russia, at Butirki, and an extensive agency at New York; at the principal factory at Ludwigshafen they employ 60 persons connected with the selling and financial part (head chemists here included) and 1,920 workmen and assistant chemists.

The color works, formerly Messrs. Lucius & Brüning, at Hoechst on the Main, employ 116 men as salesmen, clerks, &c., 42 chemists, and 1,360 workmen. They consume 36,500 tons of coal yearly and burn 810,000 cubic feet of gas. Power is supplied from 47 steam engines. Their consumption of the principal chemicals and tar products used in the manufacture of colors is, yearly:

	Tons.
All distillates from coal-tar	2,830
All salts from potassium	617
Soda	3,650
Sulphuric acid	7,765
All kinds of acids	10,740
Iron filings and turnings	1,655
Wood alcohol and common alcohol	352
Salt	2,912
Lime from marble	2,070
Other chemicals	800

In Baden there are three tar distilleries and two color factories. In Alsace-Lorraine, are three color factories.

The advantages to be derived from the full development of the alizarine manufacture in the United States will not be confined merely to the producers and consumers of the dye, but other collateral industries, such, for instance, as the manufactures of soda, of ordinary and of fuming sulphuric acid, and of bichromate and chlorate of potash, will be largely benefited, as will be seen by the following approximate calculation.

For the production of 9,000 tons of artificial 20 per cent. alizarine there are required somewhere about 3,000 tons of 55 to 60 per cent. anthracine, 3,000 to 4,000 tons of bichromate of potash (in this estimate there is no allowance made for the regeneration of the chromates), 18,800 tons of rectified sulphuric acid or correspondingly less when muriatic acid is used for precipitating the alizarine, from 2,000 to 3,000 tons of 45 to 50 per cent. anhydrous fuming sulphuric acid, 10,000 of 70 per cent. white caustic soda (this includes the necessary quantity of carbonate), and 450 to 500 tons of chlorate of potash. The manufacture of alizarine, as at present carried on, is so based and perfected by science and experience that the technical difficulties, which at the commencement were many, are now overcome by the use of apparatus suitable for the purpose, and the manufacture of this dye is now no more difficult than that of many well-known coal-tar colors.

To carry on a business of this kind successfully will, however, require not only that it be commenced with capital large enough so as to produce large quantities and thus reduce the proportion of working expenses, but also to establish it on sound, commercial and scientific principles.

FRANK W. BALLOW,
Consul.

UNITED STATES CONSULATE,
Kehl, June 5, 1883.

TOBACCO IN FRANCE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

The value of the tobacco interest to the Government of France is a revenue of about $200,000 per diem, or $73,000,000 per annum. This sum is the revenue of a small state, and at the beginning of the present century the budget of France was scarcely more than double this amount.

In 1882 the French treasury cashed from tobacco 362,000,000 of francs, being the proceeds of sales from over 35,000,000 kilograms. Home-raised tobacco figured for 15,000,000 kilograms, and the remaining 20,000,000 were imported.

BRIEF HISTORY OF TOBACCO IN FRANCE.

A brief glance at the history of tobacco in France may prove of interest.

In 1560 a French explorer who had been ambassador to Portugal, and who traveled in the Antilles, Jean Nicot by name, conceived the idea, in one of his voyages, of collecting in the island of Tabago, one of the isles of the archipelago, a plant of which the natives dried the leaves and chewed. He carried some to France and planted the seeds in his garden. The plant grew remarkably; he propagated it as an exotic curiosity, little by little, without, however, any one dreaming to make of it the repugnant use known to the savages.

A long time after, when the relations with the New World became more frequent, and travelers learned the actual use of tobacco, they became accustomed to and imported its taste into Europe. Strange to say, its use was developed under a form unknown in the country of its origin. Instead of being chewed, the weed was devoted to smoking, and being pulverized, was taken as snuff. It is difficult to explain how such a practice could have ever obtained favor with royalty and become popular with nobles, but the fact is that snuff-boxes speedily became the fashion, and king and lord and priest and burgher vied in their love for the narcotic.

The king's collectors of taxes were not long in making the new fashion pay tribute to royalty's coffers. The first tax dates back as far as a royal decree of the 17th November, 1629. It was a very mild duty. At first as a custom tax, and later on as a direct impost upon apothecaries, who had then the almost exclusive monopoly for its sale. But the apothecaries were as sharp as the tax-collectors; they sold largely and reported very little. The tax yielded insignificantly. The king then took a step which has often been repeated since; he took possession of the manufacture and sale of all tobacco. The royal ordinance instituting this monopoly dated from the 29th September, 1674. This act, however, wrought little change except in the character of the agents employed, the druggists giving way to contractors. These state agents would pay no more than 500,000 francs per annum for the monopoly, and insisted on including with tobacco that of tin. Later, however, these privileges were increased in value, yielding in 1697 the sum of 1,500,000 francs, and in 1715 the lease was still further augmented to about 2,000,000 francs.

It appears, however, that the treasury was not satisfied with this result, and in 1719 an attempt was made to prohibit home manufacture and subject the foreign import of tobacco to increased taxation. This measure signally failed, as tobacco was smuggled into the country without difficulty. In 1721 a return was therefore had to the "farming out" policy, but the "contractors" forming a coalition, the king was compelled to be content with the revenue derived, of 1,500,000 francs. Meanwhile the consumption of tobacco increased, and the demand rose rapidly. The lease for the triennial term was fixed at about 7,000,000 francs, and in 1790 the monopolists were glad to pay the Government the comparatively high figure of 30,000,000 francs. The constitutional assembly of 1791 treated the tobacco like all other monopolies, abolishing absolutely these "privileged rights," and admitting all citizens to the free enjoyment of cultivating and selling tobacco and all its products. This "free trade," home and foreign, continued till 1798, when a reaction took place in favor of the national treasury, the necessities of which were daily increasing. The entire system of national revenues was revised and, though under a different form, nearly all the monarchial taxes were revived. Thus the tobacco tax was established anew on the 22d Brumaire, an. VII.

There was, however, a more liberal policy pursued. The culture was not prohibited, but manufacturers had to pay a tax on sales fixed by the municipal authorities. This new system, badly administered, failed to prosper. It yielded scarcely 1,200,000 francs annually for the succeeding five years. Laws and decrees were in vain adopted to stop smuggling and fraud; the revenue would not exceed at the best more than from 10,000,000 to over 13,000,000 francs.

Compared with the increased consumption, the popularity of the weed having now reached nearly all classes, this sum was rightly considered ridiculously low.

By a decree of the 29th December, 1810, the Government monopoly was revived, and is to this day continued as the law, "*La régie des tabacs*," of the land. By this law the administration is alone and exclusively charged with the purchase of the tobacco leaves and cigars from home or foreign cultivators and manufacturers, and the preparation and manufacture and wholesale and retail trade of tobacco in all its forms and uses.

The manufacture is conducted to-day pretty much upon the same principles as when first inaugurated, except that great improvements are made from year to year.

When the monopoly was re-established by the decree of 1810, it was expected that there would be a large increase from its revenue, but it was never dreamed of that it would attain the present enormous figures.

In 1811 the revenue reached 37,758,390 francs; three years later it amounted to 51,111,184 francs, and in 1860 exceeded 60,000,000 francs.

From that date there has been a constantly growing increase. Revolutions, bad harvests, in fact all things which generally affect consumption, have had no influence upon the tobacco revenue.

The eloquence of the figures in the following table, showing the extraordinary growth of this monopoly by periods of five years, will substantiate all I have stated above:

France's revenue from tobacco from 1820 *to* 1882.

	Francs.
1820	64,338,834
1825	67,329,419
1830	67,428,497
1840	95,166,701
1845	111,899,915
1848	116,255,514
1850	122,068,401
1855	152,541,900
1860	193,021,299
1865	236,583,918
1870	253,334,261
1875	312,432,471
1880	333,083,000
1882	362,594,000

Thus France has arrived at a period where, from a revenue of 500,000 francs per annum for this monopoly, it has reached the enormous figure of 1,000,000 francs per diem.

Happily this enormous sum, derived from an apparently useless, if not hurtful, passion, has not been wasted, and for fifty years has served to develop many beneficial public works.

To-day, under the régime of the republic, it is doing greater service than ever before, in contributing towards the budget of public instruction, thus aiding the cause of true enlightenment and the emancipation of the masses.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, June 27, 1883.

TOBACCO IMPORTS OF FRANCE.

REPORT BY CONSUL PEIXOTTO, OF LYONS.

In a recent report [see foregoing report] I had the honor of submitting a report on tobacco in France from the point of view of the revenue.

I briefly traced the successive developments of its consumption from the commencement of the century, and indicated the corresponding progress of the taxes received from this source by the French treasury. This tax has become one of the most valuable sources of revenue to the state. There is, in fact, no other whose income is more assured and less subject to the variations of politics or financial changes affecting the national credit. Be the harvest good or bad, let the Bourse rise or fall, let there be war or peace, the consumption of the weed continues its normal course, and each year increases in importance.

As I remarked in my previous dispatch, it is scarcely ten years—not to go further back—that this tax scarcely yielded over $52,000,000, and it was then believed this figure would never be surpassed. Last year the receipts reached $69,886,000, and, judging by the results of the first semestre of 1883, the income to the state this year will reach at least $72,000,000. It is true these are the gross figures; the *régie* must from these deduct the price of its purchases of the native and foreign leaf and the expenses of manipulation and transportation. These expenses, which reach actually $13,000,000 to $15,500,000, still leave a net income to the state of nearly $58,000,000.

I have thought it would be interesting and important for our American tobacco growers to have the exact figures of the French imports of tobacco, as well as the knowledge from where these imports come.

Taking the fiscal year 1882–'83, I find that the gross receipts of the French *réqie* are, in round figures, $72,000,000. The contracts made with foreign importers for supplies during this period amounted to $5,757,962; that is to say, the French treasury purchased foreign tobacco to about this amount. This sum added to the purchase-price of native tobacco (over $3,000,000) forms a total of over $8,500,000 which the Government disbursed for its tobacco supplies.

The sum paid out for its foreign supplies was distributed among different countries as follows:

Imports from—		
United States	$2,715,334	17
Samsoun (Asiatic Turkey)	263,385	55
San Domingo	93,108	60
Alsace-Lorraine	172,458	81
Brazil	334,052	10
Hungary	222,143	02
Ukraine	60,746	75
India	50,222	46
Holland	30,339	60
Roumelia	23,160	00
Sumatra	79,709	00
Java	6,755	00
Havana and Manila	544,403	78
Total	4,595,818	84

To this amount must be added $1,061,500 for expenses of commission and advances to agents charged with making these purchases, and for the purchase of samples of different varieties of tobacco, principally those from the U. S.. If division be made of these imports according to the different parts of the globe, it will be noted that the United States takes the precedence, furnishing over two-thirds of the supply. For leaf-tobacco the United States is the first and greatest supplier, as Havana is for cigars.

There is no doubt, notwithstanding the prohibition which exists, that the United States could do a much larger business with France in cigars and tobacco if our raisers and manufacturers would undertake the enterprise. Samples of tobacco and cigars may be sent to the French *régia* free of duty. Such samples must be addressed to the "*Administration superieure des tabacs*," at Paris, and must state that they are "*Specimens sans valeur.*" If the French Government be satisfied, an order may be expected. It is worth the while to try. Tobacco and cigars not ordered directly by the Government are, as before stated, prohibited, except for particular or individual consumption, and then in limited quantities.

Imported for private use under the control and sanction of the Government, cigars and cigarettes must pay a duty of 36 francs (or about $7) by the net kilogram; other manufactures of tobacco 25 francs ($4.82) by the net kilogram. In spite of this high duty, large amounts of foreign cigars are imported and consumed in France. This is owing to the wretched quality of the cigars offered for sale by the Government. Only the lower brands, ranging from one cent to three cents apiece, have favor. The sale of these is simply enormous. The brands known as the "Londres," which sell for about six cents apiece, come next, but it is impossible to describe how varied these are in quality, no two boxes being alike, and not even are the cigars the same in the same box which are foisted on the public. The first brands of French cigars, selling for about twenty cents apiece, are the most miserable rubbish to be found in the world, and are kept or offered only for their great size and high cost; that is, for show. Their consumption is next to nothing.

Cigarettes have an almost unlimited sale, and are made of different qualities of tobacco, according to price, but the very best are exceedingly poor, and far inferior compared with those of like price in other countries, even in the United States.

BENJAMIN F. PEIXOTTO,
Consul.

UNITED STATES CONSULATE,
Lyons, July 28, 1883.

COINAGE AND CURRENCY OF THE UNITED KINGDOM.

REPORT BY MINISTER LOWELL, OF LONDON.

Referring to your separate instruction of the 21st of February last in relation to gold and silver coinage and currency in the United Kingdom, and legislation respecting the same in the year 1882, I have the honor to acquaint you that I addressed a note on the 28th of March, the day of the arrival of the instruction, to Lord Granville upon the subject, and I have to-day received his lordship's reply, with a return from the royal mint, to your interrogatories, a copy of which I beg to inclose.

J. R. LOWELL,
Minister.

LEGATION OF THE UNITED STATES,
London, April 28, 1883.

[Inclosure.]

ROYAL MINT, *April* 18, 1883.

The SECRETARY OF TREASURY:

SIR: In returning herewith the letter from the foreign office of the 2d instant, with inclosure from the United States minister, referred to me by order of the lords commissioners of Her Majesty's treasury, I have the honor to transmit a statement giving, so far as it can be furnished, the information which Mr. Lowell has requested may be supplied to him for transmission to the Department of State at Washington.

I have the honor, &c.,

C. W. FREMANTLE.

Replies to questions addressed by the United States minister to the Secretary of State for Foreign Affairs, in reference to the coinage, currency, &c., of the United Kingdom for the year 1882.

Question 1. What was the amount of gold coined, in denominations and value?

Reply. Sovereigns, nil; half sovereigns, nil.

Question 2. What was the amount of silver coined, in denominations and value?

Reply.

Half crowns	£108,306
Florins	
Shillings	80,586
Sixpences	14,850
Fourpences	69
Threepences	5,996
Twopences	40
Pence	33
	209,880

Question 3. What was the import and export of gold coin and of gold bullion?

Reply. Imports, £14,350,000; exports, £12,100,000.

Question 4. What was the import and export of silver coin and of silver bullion?

Reply. Imports, £9,100,000; exports, £8,950,000.

Question 5. What amount of gold was produced by the mines?——

Question 6. What amount of silver was produced by the mines?——

Question 7. What was the estimated amount of gold coin in the treasury, in banks, and in circulation, respectively, at the close of the year 1882?

Reply. Estimated amount of gold coin in banks and in circulation, £120,761,000.

Question 8. What was the estimated amount of silver coin in the treasury, in banks, and in circulation, respectively, at the close of the year 1882?

Reply. Estimated amount of silver coin in banks and in circulation, £19,144,000.

Question 9 What amount of paper currency, Government and other, respectively, was outstanding at the close of the year 1882?

Reply. Bank of England, £25,553,000; banks in England and Wales, £3,468,000; Scotch banks, £6,366,000; Irish banks, £8,334,000.

Question 10. Were any laws passed during the year 1882 affecting the coinage, issue, or legal-tender character of the metallic and paper circulation?

Reply. No.

REVENUE RETURNS OF GREAT BRITAIN.

REPORT BY VICE-CONSUL-GENERAL MITCHELL, OF LONDON.

I have the honor to submit herewith a statement of the gross product of the English revenue for the year 1882.

The tables are so presented as to show the receipts for each quarter of the year, together with a comparison with the corresponding periods of the year 1881, and there is little necessity to refer in more than general terms to the financial aspects of the twelve months just closed, which have been, upon the whole, moderately satisfactory.

There has been an increase of £164,000 in customs, £200,711 in stamps, £59,000 in house duty, £285,000 from the post-office, £60,000 from the telegraph, £10,000 from crown lands, and £259,036 from miscellaneous sources.

On the other hand, there has been a decrease of £144,000 in the excise, £14,000 from the land tax, £1,186,000 from the property and income tax, and £31,068 in interest on advances. The net decrease in the revenue from all sources has been £337,321.

The marked falling off in the property and income tax will be remedied in the ensuing March quarter, when the heavily increased income tax to provide for the cost of the Egyptian war, and for other purposes, which is now leviable, will be collected. The decrease of the excise was deemed of sufficient importance to receive special mention by the Queen, in her speech proroguing Parliament, as rather a source of congratulation than regret, inasmuch as it indicated a falling off in the sale of intoxicants, and an improvement in the social habits of the people.

Referring to the decreased revenues of the year, the London Times, of January 1, remarks:

> That is not a particularly encouraging state of affairs with which to enter upon a new year. There does not appear, however, to be any cause for serious apprehension. Our exports and imports are very large, larger in fact, than in any previous year except 1880. The harvest was tolerably good, although it was hardly acknowledged by men smarting from a succession of ruinously bad ones. Trade, on the whole, seems sound, and the people at large fairly prosperous. There are numerous complaints, however, that things are dull, and it must be admitted that somehow or other excellent statistics fail to afford the consolation usually expected from them. There is, in fact, a certain mediocrity about our good fortune. There is a want of spring and buoyancy in the commercial world, and though the trade is undeniably there, the profit is not so satisfactory as at some previous periods.
>
> The very magnitude of our commerce is, from one point of view, somewhat discouraging, since it seems to forbid expectation of a revival. The machinery is working at full pressure, but somehow the old results are not attained, and some begin to ask whether perchance we are not experiencing the beginning of a permanent change

in the conditions of trade. At any rate, the perhaps extravagant expectations of the famous epoch of "leaps and bounds" are no longer entertained even by the most sanguine.

L. H. MITCHELL,
Vice and Deputy Consul-General.

UNITED STATES CONSULATE-GENERAL,
London, January 1, 1883.

[Inclosure.]

THE REVENUE.

I.—*An abstract of the gross produce of the revenue of the United Kingdom in the undermentioned periods, ended December 31, 1882, compared with the corresponding periods of the preceding year:*

Source.	Quarters ended.				
	March 31, 1882.	June 30, 1882.	Sept. 30, 1882.	Dec. 31, 1882.	March 31, 1881.
Customs	£4, 764, 000	£4, 652, 000	£4, 702, 000	£5, 340, 000	£4, 771, 000
Excise	6, 868, 000	5, 880, 000	6, 205, 000	8, 155, 000	6, 880, 000
*Stamps	2, 890, 212	3, 130, 000	2, 700, 000	2, 850, 000	2, 876, 196
Land tax	959, 000	68, 000	13, 000	5, 000	973, 000
House duty	1, 101, 000	502, 000	117, 000	25, 000	1, 107, 000
Property and income tax	6, 547, 000	1, 860, 000	660, 000	815, 000	7, 670, 000
Post office	1, 830, 000	1, 790, 000	1, 710, 000	1, 830, 000	1, 705, 000
Telegraph service	375, 000	410, 000	475, 000	430, 000	375, 000
Crown lands	105, 000	80, 000	65, 000	130, 000	95, 000
Interest on advances	231, 386	357, 058	227, 620	384, 937	244, 193
†Miscellaneous	1, 338, 629	1, 247, 698	1, 486, 107	1, 033, 211	1, 172, 735
Totals	27, 009, 227	19, 976, 756	18, 360, 727	20, 998, 148	27, 869, 124

Source.	Quarters ended.			Year ended.	
	June 30, 1881.	Sept. 30, 1881.	Dec. 31, 1881.	December 31, 1882.	December 31, 1881.
Customs	£4, 587, 000	£4, 706, 000	£5, 230, 000	£19, 458, 000	£19, 294, 000
Excise	5, 865, 000	6, 295, 000	8, 212, 000	27, 108, 000	27, 252, 000
*Stamps	2, 792, 989	2, 739, 488	2, 960, 828	11, 570, 212	11, 369, 501
Land tax	64, 000	12, 000	10, 000	1, 045, 000	1, 059, 000
House duty	456, 000	103, 000	20, 000	1, 745, 000	1, 686, 000
Property and income tax	2, 005, 000	775, 000	618, 000	9, 882, 000	11, 068, 000
Post office	1, 760, 000	1, 670, 000	1, 740, 000	7, 160, 000	6, 875, 000
Telegraph service	405, 000	450, 000	400, 000	1, 690, 000	1, 630, 000
Crown lands	80, 000	65, 000	130, 000	380, 000	370, 000
Interest on advances	364, 240	234, 048	389, 588	1, 201, 001	1, 232, 069
†Miscellaneous	1, 379, 739	1, 084, 991	1, 209, 144	5, 105, 645	4, 846, 609
Totals	19, 758, 968	18, 134, 527	20, 919, 560	86, 344, 858	86, 682, 179

II.—*Increase and decrease in the periods ended December 31, 1882, as compared with corresponding periods of the preceding year.*

Source.	Quarter ended December 31, 1882.		Nine months ended December 31, 1882.		Year ended December 31, 1882.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
Customs	£110, 000	....	£171, 000	....	£164, 000	....
Excise	....	£57, 000	....	£132, 000	....	£144, 000
*Stamps	....	110, 828	186, 695	....	200, 711	....
Land tax	....	5, 000	....	....	....	14, 000
House duty	5, 000	....	65, 000	....	59, 000	....
Property and income tax	197, 000	....	....	63, 000	....	1, 186, 000
Post office	90, 000	....	160, 000	....	285, 000	....
Telegraph service	30, 000	....	60, 000	....	60, 000	....
Crown lands	....	....	....	....	10, 000	....
Interest on advances	....	4, 651	....	18, 261	....	31, 068
†Miscellaneous	....	175, 933	93, 142	....	259, 036	....
Totals	432, 000	353, 412	735, 837	213, 261	1, 037, 747	1, 375 068
Net	78, 588	....	522, 576	....	....	337, 321

* Excluding fee, &c., stamps.

† Including fee, &c., stamps.

III.—*An account showing the revenue and other receipts in the quarter ended December* 31, 1882, *the issues out of the same, the charges on the consolidated fund at that date, and the surplus or deficiency on the balance in the exchequer on December* 31, 1882, *in respect of such charges.*

Income received, as shown in Account I			£20,908,148
Amount raised by treasury bills issued to replace bills paid off			3,991,000
Amount received in repayment of advances for public works, &c			486,204
Amount received in repayment of advances for Greenwich Hospital and School			31,091
			25,506,443
Excess of the sums charged on the consolidated fund on the 31st of December, 1882, payable in March quarter, 1883, above the balance in the exchequer on the 31st of December, 1882, viz:			
Excess of charge in Great Britain		£6,379,696	
Surplus over charge in Ireland		688,743	
Net deficiency			*5,690,953
Charge on the 31st of December, 1882 (as on the other side)		13,735,803	
Paid out of growing produce in December quarter, 1882		5,011,798	
Portion of the charge payable in March quarter, 1883		8,724,005	
To meet which there was in the exchequer on December 31, 1882		3,033,052	
* Net deficiency, as above		5,690,953	
			31,197,396
Net deficiency of the balance in the exchequer to meet the charge on the 30th of September, 1882, as per last account			£3,420,013
Amount issued to repay advance in aid of ways and means			250,000
Amount applied out of the income to supply services			13,771,580
Amount advanced for Greenwich Hospital and School			20,000
Charge of the consolidated fund on 31st December, 1882, viz:			
Permanent charge of debt—			
Interest of the permanent debt	£6,048,490		
Terminable annuities	2,842,784		
Interest of exchequer bills, &c	35,582		
Management of the debt	1,955		
		8,928,811	
Interest, &c., of loans for local purposes		178,147	
Principal of treasury bills		3,991,000	
Principal of exchequer bills		700	
Advances for public works, &c		240,000	
Other consolidated fund charges—			
The civil list	£102,177		
Other charges	294,968		
		397,145	
			13,735,803
			31,197,396

TREASURY, *December* 31, 1882.

ENGLISH RAILWAYS.

REPORT BY CONSUL GRINNELL, OF BRADFORD.

I have the honor to subjoin information as to some English railways—their earnings, expenses, dividends, &c.

First. Gross earnings on the twenty-one principal railways of the

United Kingdom for the week ending February 4, 1883, as compared with the corresponding period of 1882:

Name of road.	Length of road.	1883.	1882.
	Miles.		
Caledonian Western	760½	$250,015	$264,945
Glasgow South	329	98,705	97,620
Great Eastern	983	258,545	244,960
Great Northern	901	324,640	329,880
Great Northern of Ireland	467	50,710	52,530
Great Southwest of Ireland	474	55,625	62,570
Great Western	2,239¼	654,575	669,045
Lancashire and Yorkshire	494¾	339,530	340,360
London and Brighton	430¾	157,145	155,455
London and Chatham	153¼	90,645	92,050
London and Northwestern	1,754½	909,120	913,940
London and Southwestern	796½	207,565	209,655
Manchester, Sheffield and Lincoln	289¾	176,305	164,470
Metropolitan	18½	58,860	55,300
Metropolitan District	12¾	35,750	35,210
Midland	1,260¼	638,355	656,595
Great Western of Ireland	370	41,065	39,160
North British	984¼	228,495	221,730
Northeastern	1,508½	612,505	591,975
North London	12	41,605	39,125
Southeastern	382	154,275	158,585
Total	14,621½	5,384,035	5,395,160

The following table shows the results of the working of the ten leading railways which up to this afternoon (February 10) have issued their reports:

Increase in working expenses is moderate on the whole, the proportion for the ten lines this year being 50.86 per cent., against 50.15 per cent. for the six months ended December 31, 1881.

Name of company.	Revenue second half of 1882.		Expenditures second half of 1882.	
Great Eastern	£1,827,225	$9,136,125	£957,866	$4,789,330
Great Northern	1,919,534	9,597,670	1,062,231	5,310,155
Great Western	4,053,989	20,269,945	1,970,867	9,854,335
London, Brighton, South Coast	1,126,899	5,634,495	532,464	2,663,320
London, Chatham and Dover	668,925	3,344,625	333,226	1,666,130
London and Northwestern	5,362,162	26,810,810	2,721,342	13,606,710
London and Southwestern	1,517,246	7,586,230	838,693	4,193,465
Manchester, Sheffield and Lincolnshire	1,085,319	5,426,595	575,215	2,876,075
Northeastern	3,534,603	17,673,015	1,795,323	8,976,615
Southeastern	1,167,389	5,836,945	535,898	2,679,490
Total (ten lines)	22,263,291	111,316,455	11,323,125	56,615,625

The figures below are collected from the reports of three or four of the leading railways for the latter half of 1882, and give some interesting details.

NORTHEASTERN RAILWAY.

(Length of road, 1,508½ miles.)

Capital	**$280,762,240**
Earnings half year ending December 31, 1882:	
Passengers	**$4,317,930**
Mails, parcels, &c	**732,495**
Merchandise (except minerals)	**5,434,400**
Minerals	**6,553,530**
Miscellaneous	**634,660**
Total	**17,673,015**

Working expenses, same period:

Maintenance of way	$1,939,675
Locomotive power	2,511,385
Carriage and wagon repairs	1,274,930
Tariff expenses	2,257,845
General expenses	295,845
Stationary engines, &c	70,145
Law expenses	45,000
Compensation	71,150
Rates and taxes, $416,106; Government duty, $94,540	510,640
Total	8,976,615

Leaving, after interest on bonds, debentures, &c., $5,129,350 for dividend on the consolidated and new stock, at the rate of 8¾ per cent. per annum, while $43,460,000 of preference stock, hitherto receiving 4½ per cent. per annum, will henceforth, in accordance with the terms of its issue, receive 4 per cent. per annum in perpetuity.

Parliament is prayed to authorize the issue of fresh stock for acquiring new lines and new dock facilities at Middlesborough.

Market price of stock, 173.

GREAT NORTHERN RAILWAY.

(Length of road, 901 miles.)

Capital	$169,756,155
Gross earnings	9,597,670
Operating expenses (55¼ per cent.)	5,311,155

Available for dividend, $1,479,975; dividend, 6 per cent.

The report concludes thus:

> The inactivity of the staple trades of Yorkshire, and the continued depression of the agricultural interest, might well have produced a less encouraging result.

Market price of stock, 125.

GREAT WESTERN RAILWAY.

(Length of road, 2,239¼ miles.)

Capital	$340,283,520
Earnings for half year	20,269,945
Operating expenses (49.054 per cent.)	9,854,335
Passenger transportation earnings per train per mile	1 21$\frac{1}{15}$
Freight earnings per train per mile	1 21$\frac{1}{15}$

Dividend, 7¼ per cent. per annum. Price of stock, 144.

LONDON AND NORTHWESTERN RAILWAY.

(Length of road, 1,754½ miles.)

Capital	$475,835,685
Earnings for half year	26,810,810
Operating expenses (about 51 per cent.)	13,606,705

Dividend, 8 per cent. Price of stock, 175.

These and other railways are all asking from Parliament and obtaining authorization for the increase of their capital. On this subject the London Times, in its editorial of 10th, says:

> There is one piece of advice which is almost invariably heard at half-yearly meetings of railway companies. It is usually expressed in the form of a demand that the capital accounts of the line shall be closed. If those who make this demand were to accurately distinguish between the charges which are and those which are not properly provided for out of capital, their complaints would have more weight. There are undoubtedly companies which have erred in the direction indicated, and the result has, to all appearances, been excessive fluctuations in their dividends and in the prices of their stocks. If the boards of these companies could be forced "to close their

> capital accounts" in the sense of being compelled to charge repairs and removals rigorously to revenue, it would certainly be a good thing for their shareholders. But it is quite another thing when the capital of the company is charged with the cost of a fresh piece of line and the proportion of rolling-stock required to work it efficiently as a part of the whole system of the company.
>
> This is a proper and highly beneficial extension of the capital account. The interpretation of this principle is a source of differences of opinion among railway experts. The great railways interpret it rigorously, as they ought to do, especially in times of prosperity, as was assured yesterday by Mr. Dent at the meeting of the North Eastern Railway. They can afford to do so, since their revenues are large. Smaller companies may well be contented with making sure that capital is charged with, at any rate, as little rolling-stock as possible.

The exhibits of the above-named are those of the larger and more successful railways of Great Britain; those piercing and forming a network throughout the industrial centers. The small territory, the eager competition, added to the decline in trade and the agricultural depression, all stimulate to the utmost the managers to gain business, and especially to operate their roads with the closest economy in every detail. In witness of this the manager of one of the largest roads above cited, that of the Great Western, reported at the half-yearly meeting that, "owing to the increased traffic and the larger locomotives, the consumption of coal, he was sorry to say, was greater by a pound per mile."

And this is carefully noted by a railway company earning more than $40,000,000 per annum, and in a country where the market price of coal is rather less than one mill (one-tenth of a cent) per pound.

The Great Western sells its new stock in open market to the highest bidder. The London and Northwestern and some others give their new issues to the stockholders pro rata at par. This latter plan is the subject of complaint, as not benefiting the shareholders equally, but giving the wealthier ones unfair advantages which they only can avail of.

WILLIAM F. GRINNELL,
Consul.

UNITED STATES CONSULATE,
Bradford, *February* 13, 1883.

SOUTH WALES COAL AND IRON SHIPMENTS.

REPORT BY CONSUL SIKES.

I have the honor to transmit herewith the following tables showing the foreign shipments of coal, iron, coke, and patent fuel, with the number of vessels cleared during the six months ending June 30, 1883, from Cardiff, and the agencies under this consulate, viz, Newport, Swansea, and Llanelly:

CARDIFF.

Months.	Coal.	Iron.	Coke.	Patent fuel.	Vessels.
	Tons.	*Tons.*	*Tons.*	*Tons.*	
January	534,646	8,631	1,175	18,675	496
February	521,974	9,048	1,041	18,208	438
March	500,956	11,490	3,633	14,512	427
April	581,536	6,626	6,032	5,935	539
May	586,402	11,260	587	18,991	512
June	633,799	9,963	2,668	7,773	519
Total	3,359,293	57,018	15,136	84,094	2,931

NEWPORT.

Months.	Coal.	Iron.	Coke.	Patent fuel.	Vessels
	Tons.	*Tons.*	*Tons.*	*Tons.*	
January	122, 970	19, 461	450	Nil.	164
February	145, 664	7, 206	251	Nil.	160
March	105, 525	12, 068	376	Nil.	142
April	137, 402	24, 027	213	Nil.	185
May	128, 004	17, 227	581	Nil.	156
June	141, 258	18, 082	80	Nil.	169
Total	780, 823	98, 071	1, 952	Nil.	976

SWANSEA.

Months.	Coal.	Iron.	Coke.	Patent fuel.	Vessels
January	78, 864	115	437	31, 456	186
February	70, 234	977	874	28, 514	141
March	81, 206	1, 111	95	19, 677	170
April	89, 200	462	238	28, 202	221
May	92, 556	819	955½	30, 819	212
June	92, 026	506	918	30, 978	223
Total	504, 086	3, 990	3, 517½	169, 646	1, 153

LLANELLY.

Months.	Coal, foreign.	Coal, coastwise.	Vessels
	Tons.	*Tons.*	
January	2, 359	5, 759	10
February	2, 240	6, 677	9
March	3, 640	8, 219	13
April	6, 649	9, 845	26
May	5, 891	12, 259	26
June	5, 173	8, 791	24
Total	25, 752	51, 550	108

WILLIAM W. SIKES,
Consul.

UNITED STATES CONSULATE,
July 17, 1883.

CROPS IN HOLLAND.

REPORT BY CONSUL ECKSTEIN, OF AMSTERDAM.

WHEAT.

In nine out of the eleven provinces of the Netherlands this cereal is grown this year to some extent; very little in one (North Brabant) and none at all in one (Drenthe).

Five provinces report that the acreage remains the same as in former years, two that the acreage somewhat increased this year, and two that it has more or less decreased.

In five provinces no stock of wheat remains in farmers' hands, and but little in each of the other four provinces.

The quality of this year's crop is claimed to be likely to turn out very good in eight provinces, and as good in the remaining one, Utrecht.

The quantity promises to be more than an average one in four provinces, an average quantity in two of the provinces, and less than an average quantity in the two others.

RYE.

More or less rye is produced in all of the provinces. This year there has been about the same quantity sown as in former years in five of the provinces. There has been less sown in four, and somewhat more in two.

But little stock of last year's crop remains in farmers' hands in five of the provinces, and none at all in six.

The quality of this year's crop is expected to be very good in six provinces, and good in five.

The yield is expected to result middling in five provinces; as less than an average crop in five, and as more in one, Zeeland.

BARLEY.

Barley is grown in all the provinces excepting one, Drenthe. The acreage under cultivation this year is said to have been about the same as in former years, with exception of the provinces of North Brabant and Utrecht, which report an increase.

No stock said to remain in farmers' hands from last year's crop in six provinces, and very little in the other four.

Quality of this year's crop described as "very good" in five provinces, and as "good" in the remaining five.

An average yield is expected in seven provinces, and more than an average yield in three.

OATS.

This cereal is cultivated in all of the provinces. In seven provinces the acreage remains about the same as in past years; an increase is reported from three provinces and an increase of 50 per cent. in the province of Gelderland.

No stock is said to be on hand of farmers from last crop in eight provinces, and but little in the other three.

Quality, this year's crop, expected to turn out "good" in seven provinces; "very good" in two, and in the two others, "poor."

Six provinces report that the yield of this year's crop may be expected as less than an average crop; an average crop is expected in three and more than an average crop in two provinces.

POTATOES.

An increased acreage under cultivation of potatoes is reported, this year, as compared with former years, from eight provinces, and in three it remains unchanged. No stock on hand from last year's crop in any province.

The quality of this year's crop is reported as apt to prove "very good" in seven provinces, and as "good" in four.

The yield of the crop, as to quantity, promises to be more than an average one in nine provinces, and an average in two.

RAPE-SEED.

Rape-seed, which is ordinarily and principally grown in the provinces of Groningen, Friesland, North and South Holland, and Zeeland, was less cultivated this year than in former years, in all of the above-named provinces. No stock of it on hand at present.

The quality of this year's crop in four provinces is expected to turn out a "good" one, but "poor" in Groningen.

The yield, as to quantity, an average one, in three provinces, and in two of the provinces less than an average crop.

LINSEED.

Linseed, to any extent, is grown only in the provinces of South Holland and Friesland. In the former-named province the acreage under cultivation this year shows an increase as compared with former years, and a decrease as to the latter-named province. The crop this year is expected to be an average one and of good quality.

D. ECKSTEIN,
Consul.

UNITED STATES CONSULATE,
Amsterdam, *August* 20, 1883.

MEXICAN COTTON CROP.

REPORT BY CONSUL SUTTER, OF ACAPULCO.

Referring to my report on the cotton crop for the year 1882, dated June 28, 1882, I now beg to submit to the Department of State the following data on the crop of this important staple for the present year.

The total product for this season, according to the most reliable information, may be estimated at 24,000 bales of 160 pounds of clean cotton each, which, at $14 per quintal, delivered at the port of Acapulco, or at other points of delivery within the district, brought into circulation $537,600.

Eight thousand nine hundred and twenty-two bales have been shipped from Acapulco per steamers to the ports of San Blas and Mazatlan for the consumption of mills at Tepic, Guadalajara, Mazatlan, and Guaymas; 2,400 bales are still here in warehouse, not as yet disposed of; 2,000 bales will be consumed, more or less, in the mill at Atoyac, near Acapulco, and a small part of the crop has been forwarded to the interior on mules, for the use of the mills in the States of Oaxaca, Puebla, Queretaro, and Michoacan.

The price of cotton prevailing this season throughout the land is over 12 per cent. lower to what it ruled last year; this decline in the price can only be accounted for by the fast development of railroads in this country, which now is daily brought nearer to the United States, where the staple is much lower in price and can favorably compete with the cotton raised here, notwithstanding the cost of transportation and duties. I base this statement upon the fact that only since last year American cotton has commenced to be consumed in the mills on the western coast of Mexico, although sufficient quantity is grown on this same coast to cover all their demands.

Considering the surplus of cotton, which already is manifest this season, without any probabilities of its being worked off soon, a fear creates itself that in future years, when the railroad-net will become closer, the cultivation of this staple will partly be abandoned on this coast, unless a more protective tariff be established against the introduction of American cotton.

JOHN A. SUTTER, JR.,
Consul.

UNITED STATES CONSULATE,
Acapulco, August 22, 1883.

THE SERVIAN TARIFF OF IMPORTS.

REPORT BY CONSUL SCHUYLER, OF ATHENS.

The old customs tariff of Servia is not in force for those countries which have concluded treaties giving them the rights of the most favored nation. The commercial treaty with Austria-Hungary and that with Great Britain impose a new tariff on various objects. Commercial treaties have also been concluded with Germany and France, which are said to contain new reductions of duties, but the ratification of these treaties have not yet been exchanged, and they are therefore not yet in force. No new general tariff will be published until the completion of these treaties. Goods coming from the United States would, therefore, follow the tariff contained in Annex A to the commercial treaty between Servia and Austria-Hungary, modified in certain articles by the reductions made in the treaty with Great Britain.

Annex A to the commercial treaty with Austria-Hungary is as follows:

I.—Specific Duties.

	Francs per 100 kilograms.
1. Paper:	
a. Packing paper (including gray, straw, and blotting paper, as well as the bags manufactured from these kinds of paper), card-board of all kinds, even impregnated or covered with any substance whatever	4.00
b. Printing and writing paper, even colored	7.00
c. Letter paper of every kind, and envelopes (even in card-board), printed, streaked, or ruled paper, also bound or sewed in paper or in card-board, tissue and cigarette paper, in sheets	10.00
d. Cigarette paper cut up and in books	15.00
e. Registers and memorandum books, bound in cloth or leather, with corners and clasps of ordinary metal	20.00
f. Playing cards	35.00
Tare in percentage of the gross weight: 15 in cases or barrels, 10 in baskets, 5 in bales or sacks.	
2. Flour and mill products, grain, pearled, crushed, and hulled, semolina and groats	1.00
3. Wool tissues:	
a. (1.) Rough blankets (for horses and for beds), ordinary carpets of goats' and other animals' hair, ordinary felts of animals' hair, and rough wool (even cut up into soles, &c., as well as tarred and varnished), cloth list	16.00
(2.) Rough cloths, such as cloth called *halina* coarse cloth (*Loden*), *aba*, *chaiak*, *azur*	20.00
Tare in percentage of the gross weights: 16 in cases or barrels, 8 in baskets, 5 in bales or sacks.	
b. Tissues, even mixed with a small quantity of silk, or with metallic threads, viz:	
(1.) Cloths and tissues analogous to cloths for men's clothes and other strong garments, flannels, wadmoll, long-piled cloths, teaselled, for linings, fine felt, and fine felt articles	58.00
Tare percentage of the gross weight: 18 in cases or barrels, 10 in baskets, 5 in bales or sacks.	
Remark.—Under "tissues analogous to cloths" are included also all the fashion stuffs for men's clothing, such as are manufactured at Brünn and Reichenberg (*Herrensock*, *Hosenstoffe*, *Modestoffe* "nouveautés").	
(2.) Thin, light stuffs, serving generally for women's garments (Orleans, cashmere, mohair, and the like), stuffs for furniture, table-cloths, handkerchiefs, scarfs, shawls, and analogous tissues, with or without fringes or tassels, shag and woolen velvet	90.00

	Francs per 100 kilograms.
3. Wool tissues—Continued.	
Tare in percentage of the gross weights: 18 in cases or barrels, 10 in baskets, 5 in bales or sacks.	
REMARK.—The following stuffs are included under the above: Alpaca, mohair, Orleans, Thibet, lustring, cashmere, serge, llama, goats' hair, satin, Italia cloth, merino, damask, rep, and stuffs for furniture, and fashionable stuffs for women. Handkerchiefs, shawls, and scarfs may be trimmed with simple embroidery.	
4. Articles in wood:	
a. Ordinary, *i. e.*, wheelwrights' coopers', turners', and carpenters' work; all these in the rough, neither painted, nor colored, nor varnished, nor polished, nor combined with other materials, except iron	2.00
REMARK.—Under the above are included: Casks, vats, tubs, troughs, spouts, baskets, buckets, wheels and other parts of carts (excepting ready-made carts), wheelbarrows, hand-carts and sledges, floors and their belongings, oars, benches, tables, chairs, beds, wardrobes, yokes, saddle-bows, calendars, turners' benches, sheaves, ladders, lasts, clogs, fowl-cages, spoons, plates, ordinary toys, boxes, rakes, forks, spades, boot pegs, toothpicks, strips for matches, and all other similar articles in wood, in the rough, neither painted, varnished, nor polished. Corks and cork soles are also included in this category.	
b. Furniture (and trunks) in soft wood, simply painted (or with flowers and other ordinary painted ornaments), and combined only with straw plats and iron work	3.00
c. Joiners' and turners' work and other articles of painted wood (except those mentioned under *b*), varnished, polished, even in combination with other ordinary materials	8.00
Tare in percentage of the gross weights: 18 in cases or barrels, 12 in baskets, 4 in bales or crates.	
REMARK.—The following are included in this category: Toys in wood only, pipe-stems, pipes and cigar-holders, in wood only, sticks not combined with other materials, umbrella and parasol frames combined with whalebone, steel and other similar materials, but without stuff; wood strips, bronzed and gilded, and frames made of these strips.	
5. Railway transport material. Exempt.	
6. Drinks and liquids.	
a. Wine in casks:	
1. From the growth of the districts of Versecz, Feher-Templon (Weisskirchen), and Pancsova	2.50
2. Other growths	6.00
Tare in percentage of the gross weights: 11 in double casks.	
b. Distilled spirits (alcohol, spirits of wine, brandy, rum, liquors):	
1. In casks	6.00
2. In bottles	20.00
Tare in percentage of the gross weights: 11 in cases or double casks, 5 in baskets, and 24 for the bottles.	
c. Beer in casks and bottles	3.00
REMARK.—If, on the entry of beer imported in bottles, the importer declare that he will export the bottles within three months, the tare of 35 per cent. of the weight of these bottles will not be deducted; on the other hand, custom-houses by which the beer enters will make a note of the number of bottles imported, and will restore, on the exportation of an equal or smaller number of beer bottles within the above-mentioned period, the customs and *trosarina* duties which correspond to their effective weight without levying any exportation duty.	
Tare on percentage of the gross weights: 25 in double casks, 20 in cases, 15 in simple casks, 5 in baskets, and 35 for the bottles.	
d. Vinegar	2.00
7. Mineral waters, including the bottles and pitchers	0.50
8. Coal and lignite	Free.
9. Large plaster and stone work, such as gravestones, monuments, columns (even with inscriptions), abutments and sashes, gutters, pipes, troughs, steps, &c., and other work (even in plaster) weighing at least 5 kilograms, and combined only with wood or common metal:	
a. Grindstones, whetstones, and lithographic stones, not polished	1.50
b. Polished; flagstones polished	2.00

	Francs per 100 kilograms.
10. Pottery:	
a. Common pottery, glazed or unglazed, stoneware, pipes, stove and floor tiles; these articles, even combined with unpolished and unvarnished wood or iron	2.00
b. Fine pottery and porcelain of one color or white; also white decorated with colored borders or ornaments; clay pipes; the above mentioned articles also with covers and ornaments in common metal. Under this are included also the articles contained in heading *a*, if they have similar covers or ornaments	6.00
c. Fine pottery and porcelain, colored, painted, gilded, or silvered; pottery combined with other common materials, in so far as they are not included in categories *a* and *b*	14.00
Tare in percentage of gross weights: 25 in cases or barrels, 20 in baskets or crates.	
11. Glassware:	
a. Common glass, *i. e.*, neither ground, polished, engraved, painted, nor combined with other materials:	
1. Window-glass in sheets, hollow glassware in its natural color, glass and enamel in coarse bulk, glass slabs for roofs and pavements, grooved or not	3.00
2. Hollow glassware, white	5.00
b. Hollow glass (indicated under *a*) with stoppers, bottoms, or rims polished or ground	5.00
c. Polished glass, etched or engraved, molded with designs, colored, gilded, silvered, foliated, chandelier pendants, buttons, pearls, coral, glass enamel, and paste	12.00
REMARK.—Shanks for attaching the buttons and the thread on which the pearls, coral and glass enamel are strung, merely in order to facilitate packing and carriage, will not influence the taring of these objects. If the glass objects strung on thread or string can serve without other preparation, as jewels (for example, bracelets necklaces, &c.), they will not come under division No. 11 *c*.	
d. Glassware combined with other common materials	20.00
REMARK.—Objects of hollow glass covered with reed, rush, straw, or cane wicker-work will be treated according to the quality of the glass, as in division 11 *a*, *b*, or *c*.	
Tare in percentage of the gross weights: 30 in cases or barrels, 20 in baskets or crates.	
12. Iron and steel:	
a. Iron in the rough, *i. e.*, cast iron in bars, in bulk, pig iron, &c., malleable iron and steel in bars, in prisms, bulk, or other rough pieces, iron in blooms (*Luppeneisen*, *Rohzaggel*), millbars (*Rohscheinen*), and ingots; old iron remains of iron and steel	0.80
b. Iron and steel, half-worked:	
1. Iron and steel in rods, square, hoop iron, flat or round, angle and corner iron, and steel of every kind; iron and steel plates	2.00
REMARK.—Under this heading are included all iron in bars or rods, drawn, molded, or wrought, drawn and cast steel in bars or rods of all kinds, iron called "Bosnian iron," hoop iron, L iron, V iron, T and Iron (girders), U, + iron, &c., as in general iron and steel of all shapes used in trade.	
2. Steel and iron plates and wire	3.00
c. Iron or steel agricultural tools and instruments, even with wooden arms and handles, such as fish-spears, forks, cramps, picks, spades, hatchets, rakes, scythes, sickles, chaff-cutting knives, harrows, plows, plowshares, harrow-shares, hedge and sheep shears, &c.	6.00
Tare in percentage of gross weights: 10 in cases or barrels, 6 in baskets, 3 in bales or crates.	
d. Steel or iron railway materials (except such as do not come under machines or means of transport), for instance, rails, chairs, pieces for the construction or the repair of rolling-stock, changing and crossing of lines, points, &c., parts of iron constructions for railway works	Free.
13. Sole and other common leather, *i. e.*, of a natural color, brown or black, also blacked, grained, drawn, but not bronzed or patent leather	30.00
Tare: 14 in cases or barrels, 10 in baskets, 6 in bales or sacks.	
14. *a.* Coffee surrogates	4.00
b. Sugar:	
1. Raw	5.00
2. Refined	7.00
Tare: 13 in cases or barrels, 9 in baskets, 2 in bales or sacks.	

	Francs per 100 kilograms.
15. *a.* Sulphuric and nitric acid	1.50
Green vitriol	0.60
Litharge	3.00
Half-paste, liquid or solid mass for the manufacture of paper	Free.
b. Materials for lighting, especially matches of all kinds (even in boxes), starch, and glue	5.00
Tare: 12 in cases or barrels, 8 in baskets, 4 in sacks or bales.	
16. *a.* (1). Non-scented soap	6.00
(2). Scented soap	12.00
b. Wax, stearine, paraffine, cerine, and palmitic candles	12.00
Tare: 15 in cases or barrels, 8 in baskets, 3 in bales or sacks.	
17. Machines and parts of machines in metal, wood, or other material, for the use of manufactures, trades, agriculture, breweries and distilleries, transports by water and by land, baths and other analogous uses	Free.
18. Cotton tissues:	
a. Fustian (soft thick flannel) and other similar stuffs, unbleached muslin for linings	20.00
b. Fustian and other similar stuffs, (*Kalmuk*, &c.), ticking, sacking, "Schokl," *i. e.*, bedding stuffs, woven in colors or squares, blankets, stuffs for trowsers and jackets, quilting, and other similar padded stuffs, all these articles without exception, bleached, dyed, or woven in colors or printed	25.00
c. Table linen and handkerchiefs woven in colors or printed	45.00
Tare: 18 in cases or barrels, 12 in baskets, 5 in bales or sacks.	
19. Hemp, flax, and jute:	
a. 1. Coarse cloth for sacks and packing, as also ready-made sacks and ticking for sacks. These articles may even bear colored stripes as marks	6.00
2. Common cloth (common homespun linen) and other similar strong flax or hemp cloth (as "*Flank*," "*Numerasch*," "*Kalamaika*," &c.); ticking for military clothes, sail-cloth and other strong tissues; all these kinds of cloth, even bleached but not dyed	11.00
3. All the tissues enumerated under *a* 2, dyed; next the cloth called "*Gradl*," *i. e.*, twilled cloth for bedding, mattresses, palliasses, furniture covers, canvas, and "Schökl," *i. e.*, dyed stuff for linings and sheetings in colored squares, glazed calico for clothes, bleached or woven in colors, carpets of all kinds	25.00
4. All flax tissues not included under *a* 1, 2, and 3, unbleached, bleached, woven in colors or printed, with the exception of gauze, cambric, and lawn	50.00
Tare: 18 in cases or barrels, 12 in baskets, 5 in bales or sacks.	
b. Rope-makers' work:	
1. Ropes, cables, and strings (also halters, traces, &c.)	8.00
2. Other rope-makers' work (twine, girths, canvas buckets and bottles, nets, fire-engine, and gymnastic utensils), even combined with other common materials	18.00
Tare: 15 in cases or barrels, 10 in baskets, 3 in bales or sacks.	

REMARK.—In the present tariff, under the designation of "ordinary or common materials," are included all materials other than shell, ivory, mother of pearl, Chinese lacques, meerschaum, real agate, amber, the precious metals (including plated silver [*chinasilber*]), precious and fine stones, fine pearls and corals, silk stuffs (including velvet).

II.—AD VALOREM DUTIES.

Goods tariffed at 6 *per cent.*

1 (v. I, divisions 4, 10, and 11). Toys of combined materials, pipe-stems, pipes and cigar holders of combined materials; canes combined with other materials; umbrella and parasol frames combined with materials other than those enumerated under 4 c; fine sculptured objects of wood, which do not form accessories to articles of furniture; chess boards and men; little detached figures (statuettes, &c.) in wood, china, or glass; jewelry in wood, china, or glass; needle cases and jewel boxes in wood, porcelain, or glass; cups and fans in wood, the latter covered with paper or tissues; and other small fancy objects in wood, porcelain, or glass, with or without combinations.

2. All iron or steel objects not contained in Table I under division 12 (except fine objects of cutlery and spurs, needles, hooks, pens and pen-holders, beads, clockworks, arms, and ironmongery), even in combination with other common materials.

3. Thread of flax, hemp, and other vegetable textiles excepting cotton.

4. Leather, gutta-percha, or tissue shoes.

Goods tariffed at 15 *per cent.*

5. Tobacco and manufactured tobacco.
6. Southern fruits.
7. Spices.
8. Unground coffee, rice, sponges, whalebone.
9. Incense, gum, and rosin, not elsewhere taxed, rough or ground to powder.
10. Prepared medicine and perfumery.
11. Mineral oils.
12. Pig and turkey fat and other eatable animal fats, salted or molded butter.

All other goods are tariffed at 8 per cent.

In six months, at the latest, from the date of the exchange of the ratification of the present treaty, the said ad valorem duties will be changed by mutual agreement to specific duties.

By Article VII of the treaty between Servia and Austria-Hungary, certain favors have been granted to the frontier traffic between Austria-Hungary and Servia; and among those all goods imported directly into Servia from the free traffic of the customs territory (*i. e.*, which have been manufactured in Austria-Hungary or have paid duties on importation) of the Austro-Hungarian frontier shall be submitted, at the choice of the importer, to half the duties, whether specific or ad valorem, applicable to the importations of the most favored nation. These goods are those comprised in Schedule A 1*a*, 9*a*, 10*a*, 11 *a*, 1 and 2, 12*a b*, 1 (including remark *c*).

The following are exempt from all import or export duties in the direct commerce by the common frontiers of the two countries:

(1.) Travelers', boatmen's, carters', and workmen's effects, such as linen, clothes, traveling utensils, tools, and instruments destined for their own use and in a quantity proportionate to the circumstances.

(2.) Carriages serving really for the transport of persons and of goods; carts, baskets, and similar apparatus for transports; beasts of burden and draught animals; ships with regular inventories.

(3.) Ships' provisions.

(4.) Patterns and pattern-cards which cannot serve for other purposes.

(5.) Ordinary packings and the cases, &c., in which goods are packed will not be tariffed separately, but will be treated according to the dispositions on the tares.

By Article III of the commercial treaty between Great Britain and Servia, of February 7, 1880, the following articles, when imported into Servia, are not to pay a duty exceeding 8 per cent. ad valorem:

Metal and metal manufactures, whether of one metal or different metals in combination.

Tools and cutlery of all kinds.

Machines and machinery, and detached parts thereof.

Agricultural implements and machinery.

Yarns, threads, and textile manufactures of all descriptions.

Pottery and porcelain wares and refined mineral oils.

Other goods shall pay, as the case may be, the specific duties in the Servian general conventional tariff, or an ad valorem duty of 10 per cent., at the option of the importer.

By a further declaration made between Servia and Great Britain on July 4, 1881, the duty of 8 per cent. ad valorem on woolen and cotton yarns and threads is reduced to 5 per cent. ad valorem.

When the ratifications of the commercial treaty signed between Servia and Germany on the 6th of January, 1883, shall be exchanged the importer into Servia will have the option of paying ad valorem instead of specific duties, as follows: (The numbers are given according to the paragraphs of the tariff in the treaty with Austria-Hungary.)

10 *per cent. ad valorem.*

1. Paper.
2. Meal.
4. Articles in wood.
6. *b* 1, 2; *c*, *d*. Spirits, beer, and vinegar.
7. Mineral waters.
9. Large plaster and stone work.
11. Glassware.
13. Sole and other common leather.
14. Coffee-surrogates.
15. *a*, *b*. Sulphuric and nitric acids, &c.
16. Soap, candles, &c.
19. *b* 1, 2. Ropes, cordage, &c.

8 *per cent. ad valorem.*

3. Wool tissues.
6. *a* 1, 2. Wine.
10. Pottery.
12. *a*, *b*, *c*. Iron and steel.
19. *a* 1, 2, 3, 4. Hemp, flax, and jute.

The following changes were also made in the German treaty, chiefly on articles not mentioned in the Austro-Hungarian treaty:

Half-ground rags and paper pulp, free.

Woolen hosiery (knitted and netted goods) and fringe, per 100 kilograms, 100 francs, or 8 per cent. ad valorem.

Small ware, also combined with metal thread, 100 kilograms, 70 francs, or 8 per cent. ad valorem.

Woolen yarns (weaving, embroidering, and knitting yarn), 5 per cent. ad valorem.

Iron and steel. All iron and steel objects not mentioned under 12 *a*, *b*, *c*, *d*, and 17 (see Austro-Hungarian treaty above), (excepting fine cutlery and spurs, needles, hooks, pens, penholders and pencil-cases, steel pearls, clock and watch works, arms, ironmongery), even combined with other common materials, 6 per cent. ad valorem.

Leather, all not mentioned under 13 (*vide* Austro-Hungarian treaty), 7 per cent. ad valorem.

Aniline dyes, per 100 kilograms, 50 francs, or 8 per cent. ad valorem.

Lead pencils and colored crayons, per 100 kilograms, 25 francs, or 8 per cent. ad valorem.

Cotton goods, *hosiery* (knitted and netted goods), velvet, per 100 kilograms, 85 francs, or 8 per cent. ad valorem.

Tape goods and small ware, also in combination with metal thread, per 100 kilograms, 40 francs, or 8 per cent. ad valorem.

Cotton yarns and threads (weaving, sewing, embroidering, and knitting yarns and threads), 5 per cent. ad valorem.

Hemp, flax, and jute yarns (weaving and sewing yarns and threads), 6 per cent. ad valorem.

Half silk woven and small ware, *i. e.*, silk or floret silk, mixed with cotton, linen, wool or other animal hair, also combined with metal thread, per 100 kilograms, 350 francs, or 8 per cent. ad valorem.

Ready-made shirts and underwear, of cotton or linen, per 100 kilograms, 100 francs, or 8 per cent. ad valorem.

Prepared medicines and perfumeries, 10 per cent. ad valorem (instead of 15 per cent., as in Austro-Hungarian treaty).

All other goods, with the exception of tobacco and tobacco manufactures, southern fruits, spices, raw coffee, rice, combs, whalebones, incense, and not specially mentioned gums and rosins, in the lump or powdered, pig's-fat, goose fat, and other eatable animal fats, salted or melted butter, 8 per cent. ad valorem.

EUGENE SCHUYLER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Athens, April 14, 1883.

CROPS OF ONTARIO.

REPORT BY COMMERCIAL AGENT ROBBINS, OF OTTAWA.

I have the honor to transmit herewith extracts from the Ottawa Daily Citizen, containing a summary of the August report on agriculture for the province of Ontario.

R. B. ROBBINS,
Commercial Agent.

UNITED STATES CONSULATE,
Ottawa, August 31, 1883.

The following is a summary of the August report of the Ontario Bureau of Industries:

The area under wheat this year is 1,676,545 acres, the estimated produce 26,759,439 bushels, and the average yield per acre 15.6 bushels, but later returns will probably reduce this estimate. Last year the area under wheat was 1,775,337 acres, the produce, 40,921,201 bushels, and the average yield per acre 23 bushels. The total area of fall wheat sown, as returned by township assessors for this year, was 1,178,289 acres, of which 88,734 are reported as having been plowed up or resown. The breadth of spring wheat sown is nearly the same as last year. The return made by farmers on the 15th of June showed that they had in reserve at that date 5,453,485 bushels of old wheat, or fully six months' supply for the whole province. The quantity held by millers and stored in warehouses has not been ascertained, but it is not large.

The area of barley is less than last year by 91,000 acres, and the estimated produce by 3,670,000 bushels. In the western counties of the province it was injured by the excessive rainfall of June and the first half of July, and the bulk of it is not a good sample. In the counties of York, Durham, Northumberland, and Prince Edward a large acreage has been reaped and housed in excellent condition.

The acreage under oats is larger this year than last year, and the crop is reported to be an excellent one in all parts of the province. Like other cereals, it is about two weeks later than usual in ripening. The estimated product is 5,626,000 bushels more than last year, and the average yield is nearly 40 bushels per acre.

Rye is only moderately good. The winter variety fared better than the fall wheat, but the spring rye was injured by rains and the stand was light.

Pease has been a good crop in the northern and northeastern counties, but in the west, midland, and Lake Erie counties it was scalded or drowned out by the rains. The area is somewhat less than last year, but the estimated produce is 775,000 bushels more.

The following table shows the area and produce of those staple crops of the province for 1882 and 1883:

Crops.	1882.		1883.	
	Acres.	Bushels.	Acres.	Bushels.
Fall wheat	1, 188, 520	31, 255, 202	1, 089, 455	16, 522, 359
Spring wheat	586, 817	9, 665, 999	587, 090	10, 237, 080
Barley	888, 617	24, 284, 407	757, 622	20, 613, 495
Oats	1, 375, 415	50, 097, 997	1, 423, 529	55, 724, 044
Rye	189, 031	3, 549, 898	188, 438	3, 577, 774
Pease	557, 157	10, 943, 355	541, 713	11, 718, 339
Total	4, 755, 557	129, 796, 858	4, 587, 847	118, 393, 091

Corn was planted late, and the wet weather of June and July did great injury to it. In some sections of the Lake Erie counties, where this crop is chiefly grown, was drowned out by the heavy rains, and excepting on high lands its condition at the beginning of the month was generally very poor. The area of growing crop has doubtess been considerably reduced by the unfavorable weather. The bean crop is in a more hopeful condition, as also is buckwheat. The total area under corn, beans, and buckwheat is shown by the tables to be 313,013 acres, against 276,297 acres last year.

The crop of hay and clover is doubtless the largest ever grown in the country, and the bulk of it has been well cured and safely housed. The area was 2,359,521 acres, and the estimated produce, 4,127,419 tons, againt 1,825,890 acres and 2,090,626 tons last year. It will be remembered that last year the clover was almost completely ruined by winter exposure and spring frosts, which fully accounts for the smaller area and the lighter yield as compared with this year. The second crop of clover was making fine growth at the beginning of the month, but more recent information gives ground to the fear that in many localities the seed will be destroyed by the midge. This new pest is rapidly extending to all parts of the province.

Roots made slow progress in the early part of the season. in consequence of the excess of rainfall, but the reports show that in the last half of July they made rapid and healthy growth. The chief difficulty experienced has been to keep the weeds in check. The area under potatoes is 167,302 acres, against 160,700 last year; and under carrots, mangolds, and turnips 127,198 acres, against 104,569 last year.

The fruit crop is to a large extent a failure in all parts of the province. With the exception of plums and small fruit, there will hardly be sufficient for home consumption. The trees are, however, in a healthy state generally, and have made a fine growth of young wood. Black knot is rapidly killing the cherry trees, and in some districts the plum trees also. The total area under orchard and garden this year, as collected by township assessors, is 200,846 acres. Last year's return, which was in part estimated, was 213,846 acres.

The area of cleared or improved land in the province this year is 10,587,688 acres, of which 7,745,627 acres are under field crops and orchard and garden. Last year the area of cleared land was 10,172,712 acres, of which 7,326,859 acres were under crops and orchard and garden. It thus appears that without taking account of flax and tobacco, 27 per cent. of the improved land is in pasture or fallow this year, against 28 per cent. last year.

A return of the dairy butter produce of last year shows that the quantity made was 33,442,123 pounds; but a large number of farmers were unable to fill the schedule under this head, and it is probable that the quantity given does not represent more than 70 per cent. of the actual production—probably not so much.

There are in the province this year 29 creameries, or 13 more than last year. The produce of 17 of these, from the opening of the season to the 31st of July, was 250,908 pounds, of which 217,855 pounds sold for $48,146. The number of cheese factories is 628, which is 151 more than the number reported to the bureau last year. The produce of 262 factories, that have made returns for the same period as the creameries, was 10,833,507 pounds, and of this quantity 8,431,372 pounds were sold, realizing the sum of $903,310. The quantity of cheese on hand at the 262 factories on the 1st of August was 2,402,135 pounds.

NOTES.

Madeira embroidery.—In a report on this subject published in No. 27 of these publications, Consul Du Pont-Lyle gave the exports of Madeira embroidery for the year 1881, as $3,355.34, "none of which went to the United States," while 75 per cent. thereof went to Great Britain. These returns were based upon information given by the customs authorities, but subsequent investigation proved them to be erroneous. Corrected reports received from the consul show that the total exports of Madeira embroidery during the year stated amounted to $11,978.06.

Tea experiments in Germany.—Commercial Agent Smith, of Mayence, writes to the Department as follows:

I have recently read in the German newspapers that one of the leading botanists of Germany has given to various parties in the empire samples of tea-seed of various kinds, which he had obtained from the vicinity of Peking, with a view to ascertaining whether the plant can be grown in Germany. These seeds have been distributed among some of the most reputable gardeners, and the result of their experiments with them is looked forward to with a good deal of interest. It is thought that as the tea plant is adapted to different climates, as is shown by the fact that it can be grown in Assam, on the Himalaya Mountains, in California and Japan, as well as in China, that perhaps it may be acclimated here.

Paraguayan statistics.—The following statistics were forwarded to the Department by Mr. Williams, chargé d'affaires at Paraguay:

External debt, December 31, 1881	$17,318,279 44
Internal debt, December 31, 1881	642,667 19
Total amount of exports, December 31, 1881	1,811,657 89
Total amount of imports, December 31, 1881	1,248,571 59
Revenue from customs duty on imports	712,857 75
Revenue from all other sources	63,407 32

Increase of exports.—The exports from Paraguay for the calendar year 1881, show an increase over the year 1880, of $785,131.

Adulteration of American petroleum.—Mr. Fottion, commercial agent at Mytilene, under date of August 2,1883, submits the following in regard to the adulteration of American petroleum:

I have the honor to inform you that the adulteration of petroleum in Turkey, Syria, and Trieste will destroy the trade in American petroleum at Mytilene and also at the opposite coast of Asia Minor, if not prevented. To this end it would be an excellent idea to form a depot for petroleum at the market of Mytilene, furnished directly from the United States. The customs house duties are the same as in Turkey. The rent of a magazine will be $350 to $400 per annum, and the commission is 2 per cent. for the sale. The sale, for more security, can be confided in my superintendence.

Emigration from Germany.—Consul-General Voegler, of Frankfort-on-the-Main, transmits the following information concerning emigration from Germany:

The official statistics of emigration from Germany to foreign countries for the months of January, February, March, and April of the current year show a marked decline of the tide of emigration as compared with that of the same period of 1882.

The following table will show the rise and fall of emigration from the German ports and Antwerp during said period, in each of the last seven years, viz:

1877	6,309
1878	8,277
1879	9,039
1880	29,499
1881	72,839
1882	74,787
1883	55,629

I have shown in a former report (March 13, 1882) that, since the year 1871, 95 per centum of all emigrants from Germany have gone to the United States, and I have no reason to assume that the proportion has changed during the present year.

British trade changes, 1854 to 1880.—Consul Lane, of Tunstall, supplies the following interesting statistics concerning the increase of British trade from 1854 to 1880:

Classified statement of values of imports and exports into and from Great Britain in 1854 *and* 1880, *with increase and ratio of increase in imports and exports of each class.*

Description.	1854.	1880.	Increase.	Per cent of increase.
MANUFACTURED ARTICLES.				
Imports	£9,274,033	£46,965,307	£37,691,274	406
Exports	75,778,362	168,842,435	93,064,073	123
ARTICLES PARTLY MANUFACTURED.				
Imports	13,130,671	24,780,581	11,649,910	90
Exports	12,945,378	29,417,885	16,472,507	127
RAW MATERIALS.				
Imports	56,333,672	103,532,560	47,198,888	84
Exports	3,371,225	14,018,652	10,647,427	316
FOOD PRODUCTS.				
Imports	54,704,513	171,706,814	116,922,301	213
Exports	4,859,721	9,877,436	5,017,715	103

The figures in the above table represent net imports, less re-exports, and exports of British and Irish produce only, and the compilations are made from a blue book recently prepared and printed in compliance with an order of the House of Commons, entitled "Foreign Trade Revenue, &c. (1854 to 1880)."

New paper material.—The Department has received the following report from Consul Gade, of Christiania, relative to a new industry, or rather the use of a new raw material for the manufacture of paper, which will soon begin in Norway and Sweden:

To the various raw materials already employed in manufacturing paper, such as rags, esparto, straw, and wood, all of which are expensive, a new and cheaper one, viz. white moss, will shortly be added. This moss is found in immense quantities in Norway and Sweden, but it is not the living plant as it grows in the fields which is used for making paper, but the remains of this kind of moss which has gradually accumulated in the woods. The moldering, which the moss has gradually undergone, constitutes a preparation for the paper manufacture made by nature herself. Near the place in Sweden where the first factory is now building, examination has shown that many millions of pounds of this raw material are to be found, a sufficient quantity to support a large manufactory for a number of years. Paper of different thicknesses and pasteboard made of the white moss are now shown, the latter even in sheets three-quarters of an inch thick. It is harder than wood and can easily be painted and polished. This manufacture is well suited for taking the place of wood for many purposes. It has all the good qualities, but none of the defects of wood, as it neither cracks nor warps. The pasteboard can consequently be used for door and window frames, for architectural ornaments of all kinds, and for furniture. A company founded on shares has been formed for building factories in Sweden as well as in Norway.

American imports at Havre.—Consul Glover submits the following statement showing the direct imports into Havre from the United States for the quarter ending June 30, 1883:

Agricultural implements	packages	5,977
Apples, dried:		
Barrels		2,722
Cases		100
Asbestos:		
Barrels		14
Packages		20
Cases		8
Bark extract	barrels	120
Bark:		
Sacks		7,289
Bales		412
Beef	tierces	84
Bird's skins	case	1
Bitters	cases	10
Black lead	cases	2
Blacking	cases	16
Bones	sacks	190
Books	case	1
Bristles, pigs'	bales	55
Butter	tubs	956
Carboys	cases	10
Cattle hoofs	sacks	1,003
Cedar wood	logs	2,471
Cigars	cases	9
Cheese	cases	34
Cocoa	sacks	2,430
Coffee:		
Sacks		29,720
Barrels		541
Copper:		
Slabs and bars		1,761
Barrels		1,901
Corn:		
Bushels		56,000
Tons		6,706
Cotton	bales	129,324
Cotton seed	sacks	86
Cotton waste	bales	3
Crucibles	casks	101
Effects	packages	6
Eggs, yolks of	barrels	20
Feathers	cases	8
Fish, preserved	cases	76
Fish roes	barrels	230
Flour:		
Barrels		69
Sacks		1,559
Furniture	cases	4
Glassware	cases	12
Goat skins	bales	116
Goods, miscellaneous	packages	2,975
Hair:		
Bales, horse		26
Bales, vegetable		20
Hair rope	bales	20
Hams	cases	15
Handles	packages	2,149
Hardware	cases	648

Hemp	bales..	101
Hides, salted:		
Hides		962
Packages		1,548
Dry		1,645
Honey	barrels..	5
Horns:		
Sacks		490
Cases		2
India rubber	cases and packages..	874
Indigo	seroons..	10
Intestines	barrels..	5
Kid skins	bales..	12
Lard:		
Tierces		4,475
Packages		6,862
Lard oil	barrels..	538
Leather	bale..	1
Lead	cases..	3
Linseed meal	sacks..	1,705
Lobsters	cases..	710
Lumber:		
Logs		568
Tons		1,850
Planks		13,638
Machinery	cases..	284
Machines, sewing	cases..	687
Meat, preserved	cases..	455
Nails	cases..	25
Naphtha	barrels..	9,839
Nutwood	logs..	198
Oars	packages..	14
Oil:		
Cases		490
Barrels		2,276
Orange peel	sacks..	15
Palm leaves	package..	1
Paper, pulp	packages..	400
Perfumery	cases..	29
Pearlash	barrels..	25
Pepper	barrels..	40
Petroleum	barrels..	37,738
Phosphate	tons..	400
Plants	cases..	7
Pitchforks:		
Packages		29
Cases		1,201
Pork, salted	barrels..	111
Potash	barrels..	650
Preserves	cases..	755
Rice roots	bales..	169
Roots	packages..	11
Rosin	barrels..	100
Rum	package..	1
Sacks, empty		1,336
Sarsaparilla	bales..	38
Sausage	cases..	15
Seeds	sacks..	291
Shells:		
Packages		401
Barrel		1
Silver:		
Ingots		12
Bars		129
Skins:		
Bales		13
Skins		1,614
Silk	cases..	17
Specie	cases..	2
Sponges	bales..	47

Staves		150,469
Stones, precious	case..	1
Tallow:		
Barrels		479
Tierces		1,320
Tapioca	cases..	50
Timothy seed	sacks..	200
Tobacco:		
Hogsheads		2,075
Cases		9
Tortoise shells	barrels..	6
Vanilla	cases..	4
Varnish	cases..	200
Whale bone	packages..	668
Whale oil	casks..	285
Wheat:		
Sacks		217,681
Tons		4,500
Barrels		3
Wine	cases..	167
Whisky	barrels..	2
Wood, manufacturers of	packages..	202

Test for coloring matter in wine.—Consul DuPont-Lyle, of Funchal, sends the following note, taken from Cassell's History of the Year:

The determination of the astringent matter contained in wine—*e. g.*, ænotannin, and several coloring matters closely related to it—is a most delicate process. But the recent discovery by M. Girard, in addition to being exceedingly simple, is less uncertain than those at present in use, especially when there is little astringent matter. It depends on the tendency of the matter in question to combine with animal tissues. Accordingly, some fine white cat-gut violin cords are carefully prepared, the oiling process having been omitted, and four or five of these are put together. A certain quantity is soaked in water for four or five hours (one grain having previously been detached to ascertain the water in it); then these swollen portions are put in a known quantity of the wine to be analyzed. This is quickly altered in consequence; in twenty-four hours generally, or forty-eight at most, all color has disappeared. The tanned and dyed portions of cord are then dried, first in a flat dish, then in a closed vessel at higher temperature. A comparison then made of the original cord (free from water) with the same cord tanned, colored, and dried, affords a correct estimate of the ænotannin and coloring matters of the wine.

Steam tonnage in South Wales.—The following is from a report by Consul Sikes, of Cardiff:

I have the honor to transmit a report on the increase of steam tonnage in the principal ports in South Wales. In 1881 the number of sailing vessels belonging to the port of Cardiff was 74, with a tonnage of 18,341; of steam vessels 170, with a tonnage of 84,374. In 1882 there were 75 sailing vessels, with a tonnage of 17,447, and 184 steam vessels of 100,764 tons. It will be seen, therefore, that as far as Cardiff is concerned, and it is a feature that has been generally noticeable, the number of steamers had not only increased, but there was an increase in their average size. In 1881 only 14 steam vessels belonging to Cardiff were above 1,000 tons register, in 1882 they had risen to 21. In 1881 Newport owned 80 sailing vessels of 15,181 tons, and 25 steam vessels of 5,837 tons. In 1882 the number of sailing vessels was 79, and the tonnage 14,448, while there were 29 steamships of 8,367 tons register. In Swansea, 215 sailing vessels were registered in 1881, with a tonnage of 71,287, and 29 steam vessels with 3,523 tons. In 1882 sailing vessels here had decreased to 195, with a tonnage of 68,487 tons, and steam vessels had increased to 30, with a tonnage of 4,255 tons.

The harvest of 1883 in Germany.—From a report dated September 1, by Consul-General Vogeler, of Frankfort-on-the-Main:

The following is an estimate of the harvest of Germany in the year 1883, prepared by an association of merchants interested in the grain trade, with headquarters at Vienna. The estimates with reference to Germany are made by competent gentlemen, whose names are given in the report, as an assurance of their reliability and impartiality.

The estimates for the different provinces of the Kingdom of Prussia, assuming an average crop to be equal to 100, are:

Provinces.	Wheat.	Rye.	Barley.	Oats.	Potatoes.
East Prussia	99	104	98	101	100
West Prussia	91	94	99	99	94
Brandenburg	79	87	74	61	85
Pommerania	85	85	83	80	94
Posen	87	95	94	95	96
Silesia	81	81	91	91	98
Saxony	82	83	84	73	97
Schleswig-Holstein	88	92	77	72	81
Hanover	81	91	72	58	85
Westphalia	79	87	75	59	103
Hesse-Nassau	72	68	73	65	95
Rhenish-Prussia	79	75	79	69	104
Hohenzollern	84	72	79	99	98
Whole Kingdom:					
1883	84	85	84	79	94
1882	104	108	102	102	97
1881	80	77	89	89	116
1880	105	78	101	101	106

It will be seen from this table, the materials for which were gathered in part before the rains which recently set in and which have somewhat interfered with the proper harvesting of the grain, that even if the smallest possible amount of damage resulting from unfavorable weather be assumed, the harvest of 1883 can in no event reach the tremendous results of that of 1882. Besides, potatoes are not yet harvested, and the actual yield of this important factor may somewhat vary the general result.

As to the remaining German States, I have to report as follows:

From the Kingdom of Saxony rather unfavorable reports have been received with reference to the grain crop, while potatoes are satisfactory both as to quantity and quality. Assuming the average crop to be 100, the estimates are:

Wheat, 75 to 85. (In 1882, 100 to 110.)
Rye, 70 to 80. (In 1882, 90 to 100.)
Barley, 80 to 90. (In 1882, 100.)
Oats, 80 to 90. (In 1882, 110 to 120.)

Northern Bavaria (Franconia and Swabia) reports all kinds of grain of excellent quality, sound, full, and of good color. With reference to quantity, no accurate estimate can as yet be made, as only a small portion of the harvest has been threshed. Basing estimates upon the results so far observed, the yield is:

Wheat, 97 to 103.
Rye, 102 to 110.
Barley, 114 to 118.
Oats, 114 to 118.

From Southern Bavaria the reports as to quantity are less favorable, although the quality is everywhere spoken of as excellent. The estimates are:

Wheat, 80. (In 1882, 120.)
Rye, 70. (In 1882, 95.)
Barley, 80. (In 1882, 125.)
Oats, 80. (In 1882, 125.)
Rape, 60. (In 1882, 65.)

The reports from the Palatinate are incomplete and inaccurate. It is estimated that wheat will hardly yield two-thirds of an average crop. Rye is set down at one-half of an average crop, while the quality in many regions is also indifferent. Barley has turned yellow in many parts of the province; still it is believed that a portion of the crop will be suitable for brewing purposes.

Baden reports a falling off of the harvest as against the year 1882 of about 33⅓ per cent.

The wet weather here has seriously injured the crops, especially barley.

In Wurtemberg the crop is estimated as follows:

Winter wheat, 87. (In 1882, 110.)
Summer wheat, 93. (In 1882, 107.)
Rye, 78. (In 1882, 100.)
Barley, 95. (In 1882, 110.)
Oats, 95. (In 1882, 115.)

It is claimed, however, that in this Kingdom the excellent quality of all kinds of grain this year, as compared with that of 1882, will about compensate the difference in the yield.

INDEX.

A.

Page.

Adulteration: in American petroleum 609

Agriculture: American machinery in Italy 436, 437

        farming 452

    Roumanian 491–493

    Australasian 504–512

    New Zealand 508, 509

American commercial treaty with Mexico 415–435

    manufactures counterfeited in Russia 435

    agricultural machinery in Italy 436, 437

    farming 452

    whalers at St. Helena 454

    adulteration in petroleum 609

    imports at Havre 611

Andalusia: viticulture and the Black Hand in 579, 580

Anilines: German 582–587

Antigua: trade of 445 446

Australasian agriculture 504–512

B.

Bavaria: live cattle in 489–493

    industrial statistics of 528–532

Belgian crops 502, 503

Birmingham: trade and industries of 441–445

    gun trade 441

    gold and silverware 442

    discrimination against American manufactures 442

    strike in the iron trade 443

    hand-made nails 443

    glove trade 444

    strike of coal miners 444

    potteries 444

    harvest 445

Black Hand, the, and viticulture in Andalusia 579, 580

Brazil: cattle-raising 483–485

Bridge, the Forth 566–568

British pottery and the tariff 446

    commerce of Chatham 449, 450

    Guiana, exports of 455, 456

    linen industry 516–526

    coins and currency 591, 592

    revenue returns 592–594

    railways 594–597

    trade changes, 1854–1880 610

C.

Page
California (Lower): trade of La Paz 577, 578
Canada: trade of Windsor with the United States 639, 640
crops of Ontario 607, 608
Cattle: raising in Brazil 483–485
live, in Bavaria 489–493
Chatham. (*See* British.)
Coal: of South Wales 597, 598
Coinage and currency of the United Kingdom 591, 592
Coloring matter in wine, test for 613
Commerce: of the Duch East Indies 438–441
of Chatham 449, 450
of Portugal 456–470
of Rheims, with the 570–574
of La Paz, Lower California 577, 578
Commercial: treaty between the United States and Mexico 415–428
treaty between Mexico and Germany 428–435
Counterfeiting: American manufactures in Russia 435
Cotton: mill on the St. Croix 535–539
Mexican crops 600
Crops: grain, in Russia 501, 502
Belgian 502, 503
of Silesia 503, 504
in Holland 598–600
Mexican cotton 600
of Ontario 607, 608
Cultivation of the orange tree in Spain 539–566
Currency and coinage of the United Kingdom 591, 592

D.

Denmark: harvest in 498–500
Dutch. (*See* Netherlands.)
Dutch East Indies. (*See* Netherlands.)

E.

Embroidery: of Madeira 609
Emigration from Germany 609
Europe: live-stock in 485–488
Experiments in tea growing in Germany 609
Exports of Mexican sugar to the United States 425
American agricultural machinery to Italy 436
the Dutch East Indies 438
Antigua 445
Chatham 449
British Guiana 455, 456
Portugal 458–470
Mexican 473–478
Samana 481
Roumania 491–493
New Zealand 508, 509
Windsor, Ontario 568, 569
of wine, Rheims 571–574

F.

Farming in the United States and Mexico 452–454
Fever: yellow, scientific experiments, &c 476–483

Page.
Forth: the bridge 566–568
France: Mediterranean port of St. Louis 470–473
silk harvest of 580, 582
tobacco harvest of 587–589
imports of 589
American imports at Havre 611

G.

Germany: treaty between Mexico and 428–435
farming in the United States and 452–454
aniline colors of 582–857
experiments in tea growing in 609
emigration from 609
harvest of 1883 in 613
Grain: producing and consuming countries 495–498
crops in Russia 501–502
Guiana, British: exports of 455, 45

H.

Harvest: in Denmark 498–500
the silk, in France 581, 582
of 1883 in Germany 613
Havre. (*See* France.)

I.

Imports: duties of Mexico 417–428
of Dutch East Indies 438–440
Antigua 445
Chatham 449
Portugal 456–470
Samana 481
Windsor, Ontario 568, 569
Servian tariff of 601–607
American, at Havre 611
Industry and trade of Birmingham 441–445
Monterey 450–452
American whaling, at St. Helena 454, 455
cattle, of Brazil 484, 485
of Europe 486
of Bavaria 489, 490
agricultural, of Roumania 491–493
of Australasia 504–512
Saxony 512–516
linen, of the United Kingdom 516–526
statistics of, in Russia 526–528
in Bavaria 528–532
of Portugal 533–535
orange, cultivation of, Spain 539–566
raw silk, of Italy 574–577
Iron and coal, of South Wales 597, 598
Italy: American agricultural machinery in 436, 437
raw-silk industry of 574–577

L.

Labor. (*See* Wages; also Prices.)
statistics of Russia 526–528
statistics of Bavaria 528–532

M.

Page.

Machinery: American agricultural, in Italy 436, 437
Madeira: embroidery 609
Manufactures: American, counterfeiting of, in Russia 435
Material: newspaper 610
Mexico: commercial treaty between the United States and 415–428
  commercial treaty between Germany and 428–435
  trade and industry of Monterey 450–452
  exports of 473–478
  cotton crop of 600
Mill: new cotton, on the St. Croix 535–539
Monterey. (*See* Mexico.)

N.

Netherlands, the: commerce of East India possessions 438–441
  crops of 598–600

O.

Ontario: exports and imports of Windsor 568, 569
  crop of 607, 608
Orange tree: cultivation of, in Spain 539–566

P.

Paper: new material 610
Paraguayan statistics 609
Petroleum: adulteration in American 609
Port of St. Louis, Mediterranean 470–473
Portugal: trade and commerce of 456–470
  industrial statistics of 533–535
Pottery: British, and the tariff 446
Prices of cotton in Mexico 451
  cultivating wheat in the United States and Germany 453
Products: cereal, of Portugal 459
  of Mexico 475
  Roumania 491–493
  agricultural, of Australasia 508–509
  silk, of Italy 574–577

R.

Railways: English 594–597
Returns, revenue, of Great Britain 592–594
Revenue returns, of Great Britain 592–594
Rheims: commerce of 570–574
Russia: counterfeiting American manufactures in 435
  grain crops in 501–502
  industrial and labor statistics of 526–528

S.

Saxony: industry of 512–516
Silesia: crops of 503, 504
Servian tariff imports 601–607
Silk, raw, industry of Italy 574–577
  harvest in France 581, 582
Shipping of Lisbon 469
  Samana 482
South Wales: steam tonnage 613
Spain: cultivation of the orange tree in 539–566

Page.
Statistics: commercial tariff, of Mexico 415
    of Portugal 456–470
    of American whaling, at St. Helena 455
    tables, of Portugal 464–470
    of Mexican exports 473–479
        metals 478
    cattle, stock, &c., Europe 486
        Bavaria 489
    agricultural, of Australasia 505–509
    of linen industry of Europe 516–525
    of industries in Russia 526–528
        Bavaria 528–532
    Paraguayan 609
Steam tonnage in South Wales 613
St. Croix: new cotton mill on the 535–539
St. Helena: American whalers 454, 455
St. Louis: the new French Mediterranean port of 470–473

T.

Tariff, and British pottery 446
    of Servian imports 601–607
Tea: experiments in growing in Germany 609
Test for coloring-matter in wine 613
Tobacco in France 587–589
    French imports of 589–591
Tonnage: steam, in South Wales 613
Trade and industry of Birmingham 441–445
    of Antigua 445, 446
    and industry of Monterey 450–452
    of Portugal 456–470
    changes in Great Britain, 1854–1880 610
Treaty: commercial, between the United States and Mexico 415–428
    between Mexico and Germany 428–435

U.

United Kingdom. (*See* British.)
United States: commercial treaty between Mexico and 415–428
    share of, in commerce of the Dutch East Indies 438–441
    farming in Mexico and 452–454
    commerce of Rheims with the 570–574

V.

Value of imports into Portugal 456–664
    exports from Portugal 467
Viticulture and the Black Hand of Western Andalusia 579–580

W.

Wages 526–528
Wales, South: coal and iron shipments 597–598
    steam tonnage in 613
Whalers, American, at St. Helena 454, 455
Windsor: exports and imports of 568, 569
Wine: test for coloring-matter in 613

Y.

Yellow fever scientific experiments, &c 478–483

UNITED STATES CONSULAR REPORTS.

REPORTS

FROM THE

CONSULS OF THE UNITED STATES

ON THE

COMMERCE, MANUFACTURES, ETC.,

OF THEIR

CONSULAR DISTRICTS.

No. 34.—October, 1883.

PUBLISHED BY THE DEPARTMENT OF STATE, ACCORDING TO ACT OF CONGRESS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

CONTENTS.

CONTINENT OF AFRICA.

Page

Trade of Zanzibar 626–628

(Report by Commander Barker, of the U. S. S. Enterprise.)

Trade and customs of the River Quanza 651–653

(Report by Consul Du Verge, of Saint Paul de Loanda.)

Europeans on the Congo 867

(Report by Consul Du Verge, of Saint Paul de Loanda.)

CONTINENT OF AMERICA.

Saltillo, its trade and industries 628–632

(Report by Consul Wadsworth.)

Changes in the Canadian tariff 632–641

(Report by Consul Lange, of St. Stephen.)

Trade of Rio de Janeiro 653–662

(Report by Minister Osborne.)

Commerce of Santos 662–671

(Report by Consul Wright.)

Labor in Colombia 678–688

(Report by Consul Dawson, of Baranquilla.)

Rights of foreigners in Mexico 688–714

(Reports by Consul-General Sutton, of Matamoros.)

Affairs at Tuxpan 715–720

(Report by Consul Ledet.)

Brazilian sugar factories 780–785

(Report by Consul Atherton, of Pernambuco.)

The woods of the Argentine Republic 849–866

(Report by Consul Baker, of Buenos Ayres.)

CONTINENT OF ASIA.

Corea: its people, trade, and industries 616–620

(Report by Minister Foote.)

American navigation between Southern Asia and the United States 641–650

(Report by Consul Studer, of Singapore.)

Trade and commerce of Canton 671–678

(Report by Consul Seymour.)

Opium consumption in China 720–722

(Report by Consul Seymour, of Canton.)

Silk culture in Persia 759–765

(Report by Consul-General Benjamin, of Teheran.)

Silk culture in Syria 766, 767

(Report by Consul Robeson, of Beirut.)

American trade with the South Sea Islands 778–780

(Report by Consul Canisius, of Apia.)

Railroads and mines in China 825–829

(Report by Consul Zuck, of Tientsin.)

AUSTRALASIA.

Page

New Zealand fisheries 812-815
(Report by Consul Griffin, of Auckland.)
Financial statistics of New Zealand 818-825
(Report by Consul Griffin, of Auckland.)

CONTINENT OF EUROPE.

American goods in Germany 615-616
(Report by Consul Potter, of Crefeld.)
British shipbuilding 621-625
(Report by Consul Jones, of Newcastle-upon-Tyne.)
American *vs.* Hungarian pork in Germany 651
(Report by Commercial Agent Smith, of Mayence.)
Foreign patent medicines and pharmaceutical preparations in Italy 722-724
(Report by Deputy Consul-General Wood, of Rome.)
The phylloxera in France 724-725
(Report by Consul-General Walker, of Paris.)
Art schools in Munich 725-727
(Report by Consul Harper.)
Free ports in Roumania 727, 728
(Report by Consul-General Schuyler.)
Swiss industries 729-731
(Report by Consul Beauchamp, of St. Galle.)
Agricultural productions of Russia 732-750
(Report by Consul-General Stanton, of St. Petersburg.)
The English postal savings bank system 750-759
(Report by Consul Lathrop, of Bristol.)
Swiss silk industry at the Zurich exhibition 767-771
(Report by Consul Byers, of Zurich.)
The French watch trade 771
(Report by Consul Roosevelt, of Bordeaux.)
The Swiss National Exhibition 772-778
(Report by Consul Byers, of Zurich.)
Dairy thrift in Denmark 787-802
(Report by Consul Rider, of Copenhagen.)
The Irish Fisheries 802-812
(Report by Consul Piatt, of Cork.)
French money, weights, and measures 829-846
(Report by Consular Clerk Thirion, of Paris.)

POLYNESIA.

Hawiian sugars 785-787
(Report by Consul McKinley, of Honolulu.)

NOTES.

Trade of Lyons with the United States 868
The silk-goods trade of France 868
Foreign trade of Japan 868
Export duty on Brazilian coffee 868
Austrian consular reports 868
Navigation at Bordeaux 869
Bordeaux exports and navigation 870
Decrease in Hawaiian exports 870, 871
Affairs at Vancouver 872

CONSULAR REPORTS

ON

COMMERCE, MANUFACTURES, ETC.

No. 34.—October, 1883.

AMERICAN GOODS IN GERMANY.

REPORT BY CONSUL POTTER.

There has, during the past year, been a considerable increase in the sale of useful articles and household goods imported from the United States, notwithstanding the active opposition of German manufacturers to the introduction of importations from America. There seems to exist in Prussian Germany, as I have previously reported, an organization of manufacturers and merchants for the purpose of checking the introduction and popularity of American goods in Germany. If an article of American manufacture is put upon the market here which commends itself to popular favor, it is immediately imitated, provided it cannot be kept away by a free interpretation of the tariff laws.

The following report of Mr. Edmund Taschner, an enterprising merchant, who has, in Crefeld, a handsome store for the sale of useful articles of American manufacture, contains some suggestions which may be of service to exporters and shippers in the United States:

Mr. Taschner to Consul Potter.

SIR: In reply to your request for information relating to my new American store and my trade in articles of American manufacture, I will state, for the possible benefit of exporters and manufacturers in the United States, that many articles not before known here have, through importation from America, come into extensive use, and, as a result naturally following, German manufacturers are imitating such goods with more or less skill. In small hardware, especially in cast goods, there are more imitated goods in the market than there are of original importations. The imitations are usually manufactured without the slightest alteration in the model, and are put up in such a manner that they cannot be easily distinguished from the original. This fact may be regarded as very complimentary to American taste and skill, but it is at the same time quite a serious set back to my business relations with the exporters and manufacturers of the United States.

The articles just referred to are such as coffee-pot and sad-iron stands, twine-boxes, coat and hat hooks, can-openers, brackets, handles, bells, drills, egg-beaters, apple-parers, and many other articles altogether too numerous to specify.

The American base-burning parlor stoves find in the imitation article made here an enormous competition, and the time seems near at hand when the importation of these splendid and popular stoves will cease entirely. Many iron-founders are now engaged in manufacturing imitations of the American base-burner stoves, and the stove known as the "Crown Jewel" seems to be taken as the chief model from which they are cast. The nickel finish is far inferior to that of the American stove. A few manufacturers have furnished designs to suit the German taste, somewhat modifying the exterior form of the stove, but the inner construction is always precisely like the American original. Such manufacturers are improving the quality of their castings constantly and are now doing a thriving business in imitating American stoves which they sell at moderate prices.

The duty which is levied upon American stoves is very heavy, and the importer is always kept in a state of uneasiness as to the interpretation which the custom-house officers are likely to put upon the tariff laws. Importers who ship goods to this country ought to make themselves thoroughly acquainted with the German tariff, and know how to pack their goods in such a way as to save the purchaser here much trouble and useless expense; for instance, the duty on cast-iron stoves is six marks per 100 kilograms, and upon iron goods *in connection* with nickel-plated iron is 24 marks per 100 kilograms. A duty of 24 marks per 100 kilograms is also put upon nickel-plated iron not connected with other goods.

If, therefore, the American shipper of stoves would separate the nickel-plated parts and pack them in one case and the heavy iron parts in another, the receiver would pay 24 marks per 100 kilograms on the first case, and *only* 6 marks for a similar weight on the second. It will be seen, therefore, that upon stoves sent here without separating the nickel parts in the way described, the importers must pay 24 marks per 100 kilograms on the entire weight of the stove. For lack of due care and knowledge on the part of the exporter, his goods are thus burdened with a cost for duties three or four times greater than is necessary, and at the same time rendering their sale very difficult. It is the same way with many other articles. Greater care should also be taken in packing goods, as the handling on board vessels and railroad cars is very rough, and, considering the distance the goods have to travel over land and sea, it can be truthfully said that the necessary precautions in packing and shipping are not taken. As an illustration, I will state that I received lately three large ranges which were ordered by different parties here, and I had agreed to deliver them within a certain time. They arrived in due time, but every one was more or less broken, and many of the small attachments, such as screws, knobs, &c., were lost. They were packed in crates, some weighing over 400 pounds, and the small articles and covers were put loosely in the ovens, moving and rattling whenever the package was handled. The great weight of the packages made careful handling very difficult, and thus some parts were broken. The consequence is, I not only lose the sale of the goods, but my patience and customers as well.

The difficulties referred to can be avoided by packing doors, top plates, reservoirs, grates, &c., in separate packages, leaving as few accompaniments as possible to go with the heavy parts of the stove or ranges. In the demand for American ranges I find a considerable increase, mostly in the better class of goods which are provided with all the new improvements, such as high and low closets, fancy base, shelves, reservoir, nickel trimmings, towel rail, clinkerless grate, &c. The price of these ranges is very high when compared with German goods, but the advantages are manifest and readily recognized, and since I have placed them on exhibition and in use and explained their operation I have no difficulty in selling them.

I remain, dear sir, very truly, yours,

EDM. TASCHNER,
46 *Hoch strasse, Crefeld.*

COREA: ITS PEOPLE, TRADE, AND INDUSTRIES.

REPORT OF MINISTER FOOTE, OF SEOUL.

It is very difficult to give accurate statistics in regard to the history of Corea. According to tradition the kingdom had a mythical foundation more than four thousand years ago, when some supernatural being was found in a sacred place and made king. For many centuries subsequent to this nothing is known in regard to the country.

It is stated, probably from Chinese sources, that in the year 1136 B. C. Chosan was conquered by China. After this there seems to have been a succession of different dynasties until about 150 years B. C., by internal wars, the country was divided into three independent states, known as the "Three Han." In the year 935 A. D., a usurper named Wankau united the three states under one sovereignty and called the country "Kolio."

Thirty-two successive sovereigns continued to reign under this dynasty until in the year 1391 A. D. an officer named Li-Sang Kai usurped the throne and again called the country Chosan.

His Majesty King Li-Fin, the reigning sovereign, is the twenty-eighth successor of the present line, and the year 1883 is the four hundred and ninety-second year of this dynasty.

At different times the country has been overrun by China and Japan, and has paid tribute to each.

In 1636 a Chinese army invaded Corea, and, entering the capital, made peace by exacting the following yearly tribute: 100 ounces of gold, 1,000 kilograms of silver, 10,000 bags of rice, 200 kilograms each; 2,000 rolls of silk, 300 rolls of mosi, 10,000 rolls of linen, 400 rolls of cotton, 100 rolls of better cotton, 1,000 rolls of paper, 1,000 of smaller paper, 2,000 knives, 1,000 ox horns, 40 colored mats, 200 pounds of dye-wood, 1 skepel of pepper, 100 tiger skins, 100 deer skins, 400 seal skins, 200 blue rat skins; since which time the tribute has been greatly modified, but something is still paid.

Each year an embassy goes to Peking with certain gifts, and brings back the Chinese calendar. To receive this calendar is an evidence of dependency, and if it is not used it is regarded as an act of treason.

It is necessary to report to the Chinese Emperor the accession of a new king to the throne, and to obtain his sanction thereto.

Envoys going from Corea to China are treated as Chinese subjects, and all official documents from the Corean King to the Emperor of China bear the subscription of subject.

For two hundred years, however, China has carefully avoided complications with Corea, and has never materially interfered with her internal affairs. On more than one occasion she has disavowed responsibility for the overt acts of the Corean Government. Since 1636 Corea has enjoyed a profound peace, and it has been her policy not to excite hostilities with her neighbors; to that end she has prohibited the working of gold and silver mines, lest the discovery of these precious metals should attract the lust of other nations. Unfortunately her system of seclusion has impoverished her people, and left the country stagnant.

The population is estimated at 11,000,000, and the number of houses at 1,700,000.

The Government is an absolute monarchy, all power vesting in the sovereign. He has three prime ministers, or advisers, who hold their offices for life. There are also six heads of departments, and these with three ministers constitute the council of state. They are required to report the result of their work each day to the King in person.

Of the departments, "I-Cho" has cognizance of the appointment, promotion, and dismissal of subordinate officials. "Ho-Cho" supervises the financial affairs of the kingdom, the levying of taxes, and the coining of money. Pei-Cho looks after the government of schools, the examination of students, and frames the code of ceremonies, &c.

Piyong-Cho controls the organization of the army, and directs the manufacture of arms.

Postal affairs are also committed to the jurisdiction of this department.

Pin-Cho attends to the organization of courts, and the administration of justice.

In addition to these is the department of public works and foreign affairs.

Important officials are invariably appointed from the higher classes, the common people taking little part in public affairs.

The nobility seem to have a family distinction, but their rank depends upon the grade of the highest official position which they have occupied, and attaches to them for life. For this reason officials are frequently changed, that rank may be conferred.

The result of this system is that the people are divided into parties and a bitter partisan spirit is engendered, each party seeking to secure the offices, with their titles and emoluments.

Certain special privileges attach to officials, such as exemption from arrest. They can only be summoned by a writ from the department of justice.

The Chinese method of examination for official promotion prevails. Examinations of applicants take place at stated periods, when diplomas, of which there are three classes, are conferred upon the successful candidates. The holders of these diplomas are eligible to corresponding official positions.

There are numerous private schools, but no general school system. Nearly all the common people can read and write the Corean language. In this language there are many simple books, but the learning of the country is the learning of China, and the better classes are well versed in Chinese literature.

The titles to land are derived from the Government, and are carefully registered in local offices; the tenure depends upon the payment of taxes, which are levied in kind and are onerous by reason of the unrestrained exactions of officials.

The only coin of the country is the copper cash, five hundred and twenty-five of which are equivalent to one Mexican dollar.

The roadways are narrow bridle paths, the only wheeled vehicles being two-wheeled carts, which in some places are made to transport merchandise. Bulls and Corean ponies are used as pack animals. Persons of means and distinction travel on horseback or in sedan-chairs. Inns are scarce and incommodious, but the people are said to be kind and hospitable.

Post-offices are established in the principal towns, and at some places on the public highways the Government maintains stations with post-horses for public use.

According to official accounts there are 1,300,000 enrolled militia in the country, but they are unaccustomed to drill and are without arms.

The territory of Corea is bounded on the north by the Shan-yan-alin Mountains, and two large rivers which take their rise in these mountains. The one known as the Am-no-kan, flowing westward, empties itself into the Yellow Sea, and forms the natural boundary between Corea and China; the other, known as the To-man-kian, flowing eastward, empties itself into the Japan Sea, and divides Corea from Manchuria and the Russian territory.

The kingdom is divided into eight departments, viz: Ham-keung-to the northeastern department, at the southern extremity of which is the open port of Wan-san-peung-an-to; Whang-hai-to; Kang-wun-to; Keung-que-to, in which department is situated Seôul, the capital, and the open port of In-chun; Choong-chung-to; Chun-ra-to; and Keung-sang-to, which contains the open port of Poosan.

Corea is a land of mountains. The Shan-yan-alin range extends from north to south along the eastern coast; from this, smaller ranges extend across the country. Everywhere mountain peaks are to be seen. In the central and western portion are several plains or plateaus called Maipo. These plains are extremely fertile, and for this reason Maipo s called the rice warehouse of Seôul.

The country is well watered and fairly wooded, and the Government exercises much care in maintaining the forests. Many wild animals abound in the mountains, such as tigers, leopards, bears, wild boars, &c.; and pheasants, water-fowl, and other game birds are abundant. Of the domestic animals, the bulls and cows compare favorably with those of our country; they are well bred and are used as beasts of burden. The horses are extremely small and inferior; the swine are poor and ill-favored. Goats and sheep are rarely, if ever, seen.

During the season I have found in the markets of Seôul apricots, nectarines, peaches, plums, apples, pears, and several kinds of berries. These fruits, however, perhaps for the want of cultivation and selection, are far inferior to those grown in the United States. The variety of vegetables is limited, and the quality poor. Even the potato is unknown. In spite of the severe restrictions, no inconsiderable amount of gold dust is extracted each year, and mines of gold, silver, copper, lead, and ron are said to exist in all parts of the country. In the northern disricts wheat, barley, rye, cattle, ginseng—which is a Government monopoly—medicinal herbs, dried fish, honey, tiger and leopard skins, furs, and hides are produced.

The products of the central and southern districts are rice, silk, coton, hemp, tobacco, wheat, corn, barley, beans, millet, dye-woods, fruits, vegetables, cattle, and hides.

Among the manufactures are silk, cotton and linen cloths, iron and toneware, pottery, hats, shoes, paper, mats, fans, screens, combs, pipes, brushes, tiles for roofing, certain kinds of furniture, mechanical and agricultural implements, &c. Some articles exhibit a degree of excelence, but the majority are rude and primitive. Cloths are woven in hand-looms, and pottery is made by the use of the wheel. Specimens f old bronze and porcelain are occasionally found, showing that in the past a higher degree of skill existed.

The majority of the houses are simply hovels, with mud walls and oors and thatched roofs. The better class of houses have stone foundations, intersected with flues for heating purposes. Upon this foundaion is a wooden building with tile roofs, the floors, walls, and windows f which are lined with paper.

The clothing of the common people is made invariably of cotton or linen cloth, and in winter is wadded. They wear upon their feet straw r twine sandals, with soles of rawhide, and upon their heads conicalhaped hats made of horse-hair. Their breeches are made very full, and re divided below the knees and fastened at the ankles. Over this a ong loose robe is worn, with flowing sleeves.

The people seem to be a hardy, vigorous, well-formed race, of medium tature; and while the yellow skin, almond-shaped eyes, and black hair f the Mongolian race prevails, men with light hair and beard and blue eyes are sometimes seen. The beard is suffered to grow, and the hair is never shorn, but is tied in a knot on top of the head.

The wages paid to the laboring classes approximate 15 cents per day and to the artisan 25 cents per day.

Slavery is said to exist in a modified form, and is even sometimes voluntary, as thus the poor man escapes extortion and oppression. The artisans and many classes of laborers, however, belong to powerful organizations or guilds, by which means they maintain a degree of independence and enforce their rights.

Crime is severely punished and questions involving civil rights are decided by the courts.

The women, married and unmarried, are kept in great seclusion.

The Corean nobleman, if his means will permit, maintains a degree of state, surrounded by his retainers, and goes forth to make his calls of ceremony in his sedan chair, dressed in silken robes, accompanied by a retinue of servants.

Marriage is a matter of negotiation between the parents and friends of the parties, and is often concluded in childhood. Unmarried persons of the male sex can be distinguished by the method of wearing their hair hanging down in cues. The women adorn their heads with bands of false hair; their dress consists of the broad breeches divided below the knees and fastened at the ankles; over this, a short skirt and jacket. Persons in mourning eat no meat and pay no visits. They are dressed in robes of coarse grey cotton cloth and wear immense straw hats, and when they go abroad hide the lower half of the face with a mask.

Smoking is a universal habit to which both sexes are addicted.

In conclusion, I would say that there are many industries here which might by means of the cheap labor be successfully promoted. There are mines of gold, silver, copper, lead, iron, and coal to be developed. In the north there are said to be large forests of timber, for which there should be a market near at hand.

Agriculture and cattle and sheep raising could be stimulated so as to produce a surplus for exportation, but there are difficulties to contend with; the extremes of heat and cold are great; there are no roads or means of transportation, and the policy of exclusion still has strong adherents. Corea will, however, soon require mining machinery, agricultural implements, hardware, glassware, cotton and woolen goods, coal oil, and many products and manufactures which we might supply.

LUCIUS H. FOOTE,
Envoy Extraordinary and Minister Plenipotentiary.

UNITED STATES LEGATION,
Seôul, *Corea*, *August* 21, 1883.

BRITISH SHIPBUILDING.

REPORT BY CONSUL JONES, OF NEWCASTLE-ON-TYNE, ON BRITISH SHIPBUILDING DURING THE FIRST HALF OF 1883.

Subjoined will be found schedules showing the number, tonnage, and character of ships launched in the United Kingdom during the first half of the current year, 1883.

In a former and more comprehensive report upon British shipping reference was made to the perpetual cry of over-production. This cry has been louder and longer during recent months than at any period in the history of British iron shipping. The owners complain of low freights, long continued and prevalent all over the maritime world. Builders truly assert that orders have rapidly fallen off during the present year; and these admissions have added strength and credibility to oft-repeated alarms. Surely these circumstances ought not to surprise well-informed circles, nor drive them into a panic.

The simultaneous presence at any port of a large amount of tonnage in excess of demand must of necessity depress freights. A series of misfortunes arising out of being repeatedly in wrong places may ensue to a single ship. Moreover, year after year, in ever increasing numbers, men embark in shipping without knowledge or experiuce of the trade. They are generally clerks in the offices of merchants. Two or more of them "put their heads together" and concoct a circular inviting subscribers for the sixty-four shares into which a steamer is divided. They set forth in glowing terms the kind of steamer they are about to build, the trade for which she is intended, the average freight paid in that particular trade, the rich earnings calculated for one year, and the dividend she will pay in all human probabilities. All this may look plausible and satisfactory upon paper, but the programme won't work in practice. The freights are lower and the disbursements heavier than predicted. A chapter of accidents transpires while the shareholder is overwhelmed—not by dividends but by disappointments. Therefore, he concludes, and accordingly reports, that steamers are doing very badly and that shipbuilding is overdone.

I think, however, that it can be established that large cargo steamers, possessed of all the modern improvements, and under capable management, continue to yield better dividends than are obtained from any other commercial enterprise in this country.

The statements of shipbuilders that orders are not rushing in upon quite to their satisfaction are doubtless true. But it is also true that it will take nine months of full work before the ships already in order upon their books can be launched. And it is also true that the rest of the shipbuilding world is almost at a standstill, making no important advance towards competition.

Again, notwithstanding the ever-increasing output of British tonnage during recent years, the measurement added to the register is comparatively small. Indeed, during the year 1880 there was a falling off of 1,517 tons net. The increase during the two following years was, for 1881, 121,495 tons net; for 1882, 267,383 tons net. Meanwhile the demands of commerce are increasing, and must continue to increase.

Several noteworthy features present themselves while contemplating the following schedules. It is evident that ships of smaller average

Ships built on the Tyne—Continued.

TEES.

Firms.	Iron.		Steel.		Total.	
	No.	Gross tonnage.	No.	Gross tonnage.	No.	Gross tonnage.
Raylton, Dixon & Co., Middlesborough	6	10,329	1	1,833	7	12,162
Raylton, Dixon & Co., Middlesborough	*1	1,000	......	....	1	1,000
M. Pearse & Co., Stockton	*1	11,326	......	....	1	11,326
R. Craggs & Sons, Cleveland	*2	2,309	......	....	2	2,309
Richardson, Duck & Co	*4	8,091	......	....	......	....
Total	14	33,355	1	1,833	15	35,188
Ships built in the Tees district during half of 1882	*20	32,524	......	....	20	32,524
Increase	......	831	1	1,833	......	2,664
Decrease	*6	....	......	....	5	....

* Composite.

MERSEY.

Firms.	Iron.		Steel.		Total.	
	No.	Gross tonnage.	No.	Gross tonnage.	No.	Gross tonnage.
Laird Bros., Birkenhead	4	2,996	*3	864	7	[illegible]
Evans & Co., Liverpool	4	1,665	......	....	4	1,665
W. H. Potter & Sons, Liverpool	4	8,800	*1	100	5	[illegible]
Canada Works, Liverpool	1	....	......	....	1	....
T. Royden & Sons, Liverpool	4	6,138	......	....	4	6,138
Total	17	19,599	*4	964	21	[illegible]
Ships built in Mersey district during half of 1882	11	23,938	......	....	11	[illegible]
Increase	6	....	*4	964	11	....
Decrease	......	4,339	......	....	......	[illegible]

* Composite.

BARROW, WHITEHAVEN & WORKINGTON.

Firms.	Iron.		Steel.		Total.	
	No.	Gross tonnage.	No.	Gross tonnage.	No.	Gross tonnage.
Caird, Purdie & Company, Barrow in Furness	2	3,428	1	2,070	3	[illegible]
Barrow Shipbuilding Company	4	4,691	1	930	5	[illegible]
Whitehaven Shipbuilding Company	3	4,001	......	....	3	[illegible]
R. Williamson & Son	1	1,839	......	....	1	[illegible]
Total	10	14,059	2	3,000	12	[illegible]
Ships built in Barrow, Whitehaven, and Workington district during half of 1882	11	22,735	1	3,726	12	[illegible]
Increase	......	....	1	....	......	....
Decrease	1	8,676	......	726	......	[illegible]

WEST HARTLEPOOL.

Firms.	Iron.		Steel.		Total.	
	No.	Gross tonnage.	No.	Gross tonnage.	No.	Gross tonnage.
W. Gray & Co	9	12,315	......	....	9	[illegible]
E. Withy & Co., West Hartlepool	6	10,722	......	....	6	[illegible]
Irvine & Co	3	3,626	......	....	3	[illegible]
Total	18	26,663	......	....	18	[illegible]
Ships built in West Hartlepool district during half of 1882	20	33,683	......	....	20	[illegible]
Increase	......	....	......	....	......	
Decrease	2	7,020	......	....	2	[illegible]

DUNDEE.

Firms.	Iron.		Steel.		Total.	
	No.	Gross tonnage.	No.	Gross tonnage.	No.	Gross tonnage.
Pearce Bros., Dundee	6	3,326	......	....	6	3,326
Gourlay Bros., Dundee	1	3,610	3	5,722	4	9,332
W. B. Thompson, Dundee	1	1,526	1	1,000	2	2,526
A. Stephens & Sons, Dundee	......	....	......	....	......	....
Total	8	8,462	4	6,722	12	15,184
Ships built in Dundee during half of 1882	7	7,230	2	2,684	9	9,914
Increase	1	1,232	2	4,038	3	5,270
Decrease	......	....	......	....	......	....

Ships built on the Tyne—Continued.

BELFAST.

Firms.	Iron.		Steel.		Total.	
	No.	Gross tonnage.	No.	Gross tonnage.	No.	Gross tonnage.
Workman, Clark & Co., Belfast	4	4,407	1	1,714	5	6,221
Harland & Wolff, Belfast	2	568	4	3,497	6	4,065
	6	4,975				
Paul Rogers, Carrickfergus	*2	124			2	124
Total	8	5,099	5	5,211	13	10,310
Ships built in Belfast during half of 1882	4	8,834	3	5,226	7	14,060
Increase	4		2	985	6	
Decrease		3,735				3,750

* Wood.

HULL.

Earle's Shipbuilding and Engineering Company	8	8,239			8	8,239
Ships built in Hull during half of 1882	6	8,324			6	8,324
Increase	2				2	
Decrease		85				85

ABERDEEN.

Hall, Russell & Co	3	4,789			3	4,789
Ships built in Aberdeen during half of 1882	3	5,744			3	5,744
Increase						
Decrease		955				955

SOUTHAMPTON.

Oswald, Mordaunt & Co	7	16,498			7	16,498
Ships built in Southampton during half of 1882	7	12,062			7	12,062
Increase		4,436				4,436
Decrease						

WHITBY.

Thomas Turnbull & Sons	4	6,681			4	6,681
Ships built in Whitby during half of 1882	4	6,524			4	6,524
Increase		157				157
Decrease						

KIRKALDY.

I. Key & Sons			3	4,906	3	4,906

SHIPS BUILT DURING THE HALF OF 1882-'83.

Ships built by the foregoing firms during the first half of 1883	315	471,893	60	77,654	375	549,547
Ships built by the foregoing firms during the first half of 1882	328	542,372	39	67,900	367	610,272
Increase			21	9,754	8	
Decrease	13	70,479				60,725

TRADE OF ZANZIBAR.

REPORT BY COMMANDER ALBERT S. BARKER, OF THE U.S.S. ENTERPRISE.

[Published by permission of the Navy Department.]

* * * * * * *

BUSINESS HOUSES.

The trade of the port is principally with the United States, England, Germany, and France. There are two American houses, viz: Ropes, Emmett & Co. and Arnold, Hines & Co.; one English house, Smith & McKenzie; two German houses, Wm. Oswald & Co., and Häusen & Co., Hamburg; and one French house, Reux Defrecient, Marseilles.

The two American houses of Ropes, Emmett & Co. and Arnold, Hines & Co. are united in the Madagascar trade. There is also the American house of George Ropes.

The French, German, and English carry on their trade almost entirely by the regular line of steamers. During the past year (1882) six or eight German merchant vessels visited the port.

IMPORTS.

The imports consist of general merchandise, especially all sorts of cheap cotton prints from the United States and India, and a general assortment of ironmongery, from England, principally.

The American houses import principally sheeting, cotton prints, and kerosene. In the last year or so they have met with considerable competition from Indian manufacturers of cheap cotton goods. Last year (1882) they imported from 6,000 to 8,000 bales of unbleached sheeting, cotton drills, and shirting; also 30,000 boxes of American soap, and large quantities of American clocks and fancy biscuits.

Kerosene has been imported in late years in large quantities, having almost entirely superseded the native cocoanut oil as an illuminator. American houses imported 50,000 cases in 1882.

The French, English, and Germans import mostly English print goods and ironmongery, beads, crockery, gin and other cheap liquors, soap, and a general assortment of canned provisions.

From India, rice and grains are the principal imports; also cheap cotton goods. The trade with India is carried on principally in the Sultan's steamers, of which there are six.

EXPORTS.

The principal exports are cloves, from Pemba and Zanzibar. Owing to a duty of $2.50 per farsaleh (35 pounds), which the Sultan has imposed upon cloves from the island of Pemba, the production of cloves on that island has been materially affected. In addition to this there is a general import duty of 5 per cent.; and as the price of cloves has fallen 50 per cent. (from $10 to $5 per farsaleh) those combined duties leave but a small profit to the producer.

The other exports consist principally of ebony, hides, opal, ivory, red peppers, cocoanut oil, sesame seed, and orchilla weed; the latter principally from Madagascar.

Value of German imports, 1882, $775,000; value of German exports, 1882, $475,000.

The trade with the natives is directly carried on by Banyans and Hindis, through whom these houses deal. The custom-house is leased or "farmed out" to a Banyan firm for $500,000 a year. General custom duty is 5 per cent.

VESSELS EMPLOYED.

French steamer Ville d'Alger, with 1,000 tons of coal and general merchandise, Marseilles. American brig Jane Adeline, Boston. German bark from Hamburg. Sultan's steamers: three merchant steamers and two men-of-war. H. M. S. London, storeship. Eastern Telegraph Company's steamer Great Northern; Eastern Telegraph Company's coal hulk Indies. British East India Company: Monthly steamer from Aden plies between Aden and Delagoa Bay, touching at Zanzibar each way; the trip from Aden to Zanzibar occupying about nine days, and from Zanzibar to Aden about six days, depending on monsoon.

TELEGRAPHIC COMMUNICATION.

Telegraphic communication with the United States by submarine cable via Aden. Charges to the United States, 8*s.* 9*d.* per word. The cables, two in number, cross the island of Baivé, lying 3 miles west-northwest of the town. The general direction of these cables between Baivé and Zanzibar is indicated by a beacon marked "cable" off Point Shangani, in line with the "*white mark*" on the English jail. The telegraph office is in a large white building on the extreme end of Shangani Point, from which the telegraph company's flag is generally flying.

MISCELLANEOUS.

Postal communication with the United States is by monthly mail to and from the United States by British East India Company's steamers via Aden. Route is to Aden, to Brindisi (Italy), thence to London, &c. To United States, about thirty-five days. Postage, 4½ annas (9 cents) per half ounce.

No docking facilities.

About twelve American citizens resident.

The climate is, generally speaking, unhealthy at all seasons, especially for Europeans. Even the natives do not expose themselves to the heavy dews. The seasons are somewhat irregular, there being two summers, the first in February and the second in September. Two winters, the shorter in December and the longer and more marked in July. Double rainy seasons; the heaviest rains from April to June, the least in October and November. About three months of northeast trade to nine of southeast and southwest. (Burton's Zanzibar.)

Fever is the prevailing disease. There is also much diarrhea and dysentery. Venereal diseases also abound to a remarkable extent. Bad drainage is said to be the cause of much sickness. To the water is attributed many of the causes of disease.

Watering facilities are good, but quality of water only fair, and should not be used for drinking or cooking purposes. At the landing in front of the Sultan's palace is a pump or hydrant. Our steam cutter always watered here by hose, free of charge.

The tradesmen with whom we had business transactions were courteous and polite in supplying our wants, and their charges were reasonable.

Inclosures.—Value of export trade from Zanzibar to the United States, 1882–'83; also American shipping trading with Zanzibar, 1882–'83.

ALBERT S. BARKER,
Commander, U. S. N.

U. S. S. ENTERPRISE,
Zanzibar, July, 1883.

Value of export trade from Zanzibar to the United States. 1882–'83.

Articles.	First quarter, 1882.	Second quarter, 1882.	Third quarter, 1882.	Fourth quarter, 1882.	First quarter, 1883.
Ivory, assorted	$136,080 00	$111,550 00	$159,791 00	$95,544 00	$54,852 00
Gum copal	48,572 00	45,531 00	48,000 00	28,470 00	14,701 00
Cloves	91,040 00	49,883 00	35,232 00	58,998 00	32,188 00
Hides	29,053 00	62,916 00	17,712 00		
Goat skins	7,304 00	5,174 00	3,631 00	539 00	116 00
Red peppers	2,019 00	10,852 00	21,519 00	1,404 00	1,486 00
Clove stems	2,255 00	3,225 00			5,082 00
Ebony	839 87	495 00	638 00	1,317 00	640 00
Aloes	322 00	1,389 00			
Shells	223 00	913 00			395 00
Rubber		24,449 00	26,474 00	4,579 00	
Gum myrrh		695 00			
Amber gris		161 00			
Coir yarn			140 00		
Coir fiber			632 00		
Molasses					6 00
Total	308,807 87	317,242 00	313,769 00	190,851 00	90,466 00

American shipping trading with Zanzibar during year 1882–'83.

Names of vessels.	Class.	Tonnage.	Value of imports.	Value of exports.
1882.				
Chaco	Bark	628	$17,855 00	
J. A. Ropes	..do ..	711	66,180 00	$48,458 00
R. A. Russell	..do ..	762	27,545 60	Ballast.
Taria Topan	..do ..	632	57,426 00	$75,671 72
Sarah Hobart	..do ..	495	6,150 00	11,709 00
S. B. Allen	..do ..	586	124,247 00	51,968 00
Rosie Welt	Ship	1,436	193,592 00	1,317 00
Alice	Bark	859	35,000 00	17,987 00
1883.				
San Jacinto	Brig	498	5,710 00	36,294 00
Taria Topan	Bark	632	15,744 00	27,542 00
Glide	..do ..	492	Ballast	45,053 00
Alice	..do ..	859	do	20,710 00
Sicilian	..do ..	287	$58,500 00	17,000 00
Minerva	..do ..	337	15,000 00	15,000 00
Annie Reed	..do ..	718	20,000 00	49,350 00
Oakland	Ship	1,237	200,000 00	Ballast.
Jane Adelaine	Brig		60,000 00	

CITY OF SALTILLO, MEXICO.

REPORT BY CONSUL WADSWORTH.

Saltillo, the capital of the State of Coahuila, Mexico, founded 1586, now having a population of 20,000, is beautifully situated on a slope of the Buena Vista table-land, a part of the great central Mexican plateau, at an elevation of 5,217 feet above the level of the sea, in latitude 25° 25′ north, and longitude 1° 15′ west of the city of Mexico, shut in on all sides except the south by the great Sierra Madre range of mountains, and thus protected from the cold winds of the north that at times sweep over the countries to the east of us.

Most excellent water breaks forth from many springs at the top of the hill, and is thence conducted in pipes and irrigating ditches to the houses, gardens, and orchards, where grow in abundance peaches, grapes, apples, and quinces, the two latter being shipped in great quantities to the frontier.

CLIMATE.

The climate, dry, equable, and salubrious, is unsurpassed on this continent, as will be apparent by examination of the following table. From daily observation of the thermometer (Fahrenheit), which I took for three years, I have calculated the mean monthly temperature for the year, under shelter, in the shade, as follows:

Mean monthly temperature (Fahrenheit) from three years' observations—1878–'79–'80.

Months.	Sunrise.	Noon.	Sunset.	Extremes.					
				Lowest.			Highest.		
	°	°	°	°	°	°	°	°	°
January	66	72	69	54	55	58	70	74	70
February	64	68	66	60	62	62	68	76	70
March	67	71	69	63	68	68	72	78	71
April	71	75	73	64	68	68	74	82	78
May	75	79	79	72	72	72	80	86	83
June	74	79	78	72	77	76	78	85	84
July	71	77	75	68	72	73	74	83	86
August	72	77	75	68	69	68	75	80	78
September	67	72	70	58	60	60	70	81	76
October	69	75	62	61	64	64	74	81	76
November	62	67	64	58	64	61	70	73	70
December	57	60	58	52	50	54	61	70	64

As will be seen by the table, the warm months are not July and August, but May and June, but this will be understood by reference to the following table of days of rain which I observed in 1880.

DAYS OF RAIN (78).

January	0
February	3
March	2
April	0
May	7
June	17
July	22
August	11
September	10
October	3
November	1
December	2

The "aguaceros" (thunder-storms) commence in June, falling in copious showers for an hour or two in the afternoon, reducing the temperature and purifying the atmosphere, and to them is due the delightfu temperature of the summer months.

HEALTH.

The equability of the climate and the perfect natural drainage of the city, situated as it is on a hill-side, make Saltillo an exceptionally healthy residence, in spite of total lack of any system of sewerage or observance of hygienic laws by the lower classes.

"The qualities which render a climate favorable are elevation, uniformity, and dryness." (Professor Flint.)

There is hardly a day in the year that an invalid need be deprived of out-of-door exercise on account of inclement weather.

The annual mortality is about 22 per 1,000, far in excess of what it should be, but of this 13 per 1,000 is among children under 5 years of age and caused to a great extent by imprudent use of green fruit during the summer months, when the infant mortality is double that of winter.

IMPROVEMENTS.

Under a wise administration, public instruction—the bulwark of free institutions—has been carefully seen to, there now existing over 200 schools in the State, with more than 10,000 scholars, 7½ per cent. of the population receiving the benefits of instruction in the public schools.

A State penitentiary has just been completed at this capital, and with a strict enforcement of the criminal laws, the suppression of gambling, and the prolonged peace now enjoyed by the State, crime has decreased 75 per cent. during the last six years.

A New York company, having obtained valuable concessions, has recently opened a telephone exchange in the city, and now has more than sixty telephones in use, and is extending its lines to the neighboring villages and factories.

The Mexican National Railway (narrow gauge) is now running trains from Laredo, Tex., to within nine miles of the city, and will reach here within a few days.

The Mexican International Railroad (standard gauge), from Eagle Pass, Tex., has already reached the Sabinas River, in the northern part of the State, 75 miles from the Rio Grande, and its engineers expect to reach this place by next year.

The State Government, in proof of the good-will they bear these great enterprises, has granted them free right of way through all city lands throughout the State.

Americans have recently opened a hotel here to accommodate travel, and several American boarding-houses have also been opened. *Pari passu* with these improvements come also American bar-rooms, the inevitable accompaniment of the new order of things.

COTTON AND COTTON GOODS.

The domestic cloth manufactured here finds its market in this and the neighboring States. There are six cotton factories near the city, moved by water-power, consuming annually 500,000 pounds of cotton, most of which is grown in the Laguna region, in the southwest of the State.

American cotton gives more satisfaction, being cleaner and of better quality, but the consumers claim that they can buy on time to better advantage from Mexican producers than from American factors.

COMMERCE.

Istle and goat-skins form the principal exports from this district.

Imports.—It is almost impossible to classify the imports into the city, but from an examination of a *résumé* of the federal custom-house here it appears that there were introduced into the city foreign goods as follows:

Fiscal year ending June, 1882	$140,835 66
Fiscal year ending June, 1883	175,875 08

Of this amount there was brought from the Rio Grande frontier—

In 1882	$118,404 53
In 1883	127,774 49

In this connection it is well to bear in mind that these figures represent only those goods which have passed through the custom-house, and that no estimate can be made as to those introduced clandestinely from the Zona Libre or Free Belt on the Rio Grande.

As showing the changes induced by railroads I find that while in the fiscal year 1882, of goods imported $5,498 came through Laredo and $54,413.22 through Matamoros, for the fiscal year ending June 30, 1883, $58,497.39 came through Laredo, and but $16,306.05 through Matamoros.

The customs officials estimate that about 75 per cent. of goods imported are of American production. In the foregoing no calculation is made as to the value of American machinery and agricultural implements, immense quantities of which are now being introduced. It is impossible to give the amount, as they are admitted free of duty and importers are reluctant to furnish information on this point.

TAXES.

The State taxation is at the rate of 6 per 1,000 on city property and 8 per 1,000 on country property, factories, industries, and arts. Merchandise pays 15 per 1,000. Foreign goods introduced into the city pay a municipal duty of 15 cents per *arroba* of 25 pounds weight, but American cotton is taxed at $1.50 per 100 pounds, while the native pays 12 cents per bale.

To the amount of municipal duties collected is added 20 per cent. thereof for the State, and 25 per cent. for the federal treasury. There is a probability that the legislature now in session will abolish or modify these municipal taxes on goods introduced, in order to make this city a general depot for supplies, for which its geographical location and excellent climate so well adapt it.

MINING.

During the days of the Spaniards the mineral districts of the State were extensively worked, but after the independence of the country mining industry was to a great extent abandoned, owing to want of capital and to exposure to Indian raids.

Silver mines are now being worked by American capital in Muzquiz, in Sierra Mojada, and in Monclova, and copper mines in Candela.

Immense coal deposits have been discovered in the northern part of the State, and with their development and the extension of the railroad system it is expected that the mining industry here and in the adjoining States will receive a new stimulus.

COST OF LIVING, ETC.

With the approach of the railroad, and consequent influx of foreigners, rents for the last year have increased from 50 to 100 per cent. Good residences on the principal streets, that formerly rented for from $10 to $20 per month, now bring from $15 to $40. The following list gives retail prices for articles of food:

Beef	per pound	$0.10
Mutton	do	10
Flour	do	6
Sugar, white	do	18
Sugar, brown	do	5

Coffee	per pound	$0 21
Tea	do	1 50
Chocolate	do	50
Rice	do	15
Ham and bacon, American	do	50
Cheese, American	do	50
Crackers, American	do	50
Eggs	per dozen.	37

Many inquiries have been made for city property by Americans, but thus far no sales have been perfected, prices being unsettled and property held at prospective valuation.

It is believed that when this city has once suitable accommodations for travelers and invalids it will become a resort for health and pleasure seekers, on account of its agreeable and benignant climate.

J. W. WADSWORTH,
Consul.

UNITED STATES CONSULATE,
Saltillo, August 21, 1883.

CHANGES IN THE CANADIAN TARIFF.

REPORT BY CONSUL LANGE, OF SAINT STEPHEN, N. B., ON THE CHANGES OF TARIFF AS ENACTED AT THE LAST SESSION OF THE DOMINION PARLIAMENT.

Acids:

1. Acetic, now twelve cents per imperial gallon, to be fifteen cents. (15 cents per I. G.)

Strike out the words "sulphuric and nitric in a combined state, twenty per cent. ad valorem," and substitute the following in lieu thereof:

2. Sulphuric and nitric combined and all mixed acids, twenty-five per cent. ad valorem. (25 per cent. ad valorem.)

3. Under the heading, "Books, &c.," in the item "playing cards," strike out the words and figures "thirty per cent. ad valorem, 30 per cent." and insert the words "six cents per pack." (6 cents per pack.)

4. In the items, "Printed music, bound or in sheets," strike out the word and figure "six, 6," and insert the word and figures "ten, 10." (10 cents per pound.)

5. Braces or suspenders, now 25 per cent., to be 30 per cent. (30 per cent. ad valorem.)

Carriages:

Strike out the whole of this item and substitute the following in lieu thereof:

6 to 12. Carriages: Buggies of all kinds, farm wagons; farm, railway, or freight carts; pleasure carts or gigs, and similar vehicles, and all other carriages not otherwise enumerated, thirty-five per cent. ad valorem, to take effect on and after the tenth day of May next. (35 per cent. ad valorem.)

13. Railway cars, sleighs, cutters, wheelbarrows and hand-carts, thirty per cent. ad valorem. (30 per cent. ad valorem.)

14 to 19. Children's carriages of all kinds, thirty-five per cent. ad valorem, to take effect on the 10th of May, 1883. (35 per cent. ad valorem.

20. Parts of carriages or other manufactured articles shall be charged with the same rate of duty, on a proportionate valuation, as that chargeable upon the finished article.

21. Under the heading "Cotton, manufactures of," in the item "cotton, duck, or canvas of hemp or flax, and sail twine, when to be used for boats and ships' sails, five per cent. ad valorem," strike out the words "cotton, duck, or" and provide that: The importer of cotton duck used for sails of ships or fishing boats or other vessels shall be entitled to a drawback equal to the duty paid thereon, less five per cent. of the value of the article, on furnishing proof that the duck had been so used, under regulations to be made by the minister of customs.

After the item, "all clothing made of cotton or other material, etc.," insert the item:

22. Lamp-wicks thirty per cent. ad valorem. (30 per cent.)

And, also, the following:

23. Provided that printed or dyed cottons, except jeans, coutelles, cambrics, silicias, and casbans, shall on and after the first day of January, 1884, be charged with a duty of twenty-seven and one-half per cent. ad valorem. (27½ per cent. ad valorem.)

Strike out the items concerning "Cordage for ships' purposes." and "cordage, all other, including manilla, marline, etc.," and substitute therefor:

24. Cordage of all kinds, twenty per cent. ad valorem. (20 per cent. ad valorem.)

Strike out the item "drain-tile and drain-pipes and sewer-pipes, etc., twenty per cent.," and substitute the following items in lieu thereof:

25. Drain-tile, not glazed, twenty per cent. ad valorem. (20 per cent. ad valorem.)

26. Drain-pipes and sewer-pipes, glazed, twenty-five per cent. (25 per cent. ad valorem.)

27. Under the heading "Fruits, dried," in the second item, "currants, dates, etc.," the duty of twenty-five per cent. to be reduced to twenty per cent. (20 per cent.)

28. In the item "fruits in air-tight cans," after the words "including cans," strike out the words "three cents per pound if sweetened and two cents per pound if not sweetened," and insert the words: Weighing not over one pound, three cents per can (3 cents per can) and three cents additional per can for each pound or fraction of a pound over one pound in weight.

29. Under the heading "Furniture," after the word "furniture," and before the word "house," insert the words: Of wood, iron, or any other material. After the words "bolsters and pillows," and before the words "caskets and coffins," strike out the words "show-cases," and add the following item: Show-cases, a specific duty of two dollars each, and, in addition thereto, thirty-five per cent. ad valorem. (35 per cent. ad valorem.)

30. Under the heading "Iron and manufactures of," after the item concerning "lap-welded boiler-iron tubing," and before the item concerning "bedsteads and other iron furniture," strike out the heading "Manufactures of iron or steel, or of iron and steel combined."

31. In the item "bedsteads and other iron furniture and ornamental iron work and wire work," strike out the words "bedsteads and other iron furniture," and include the same in the item concerning "furniture, house, cabinet, or office," thirty-five per cent. ad valorem. (35 per cent. ad valorem.)

After the item concerning "sewing-machines," and before the item concerning "ink for writing," insert the following:

32. All articles rated as iron or manufactures of iron shall be chargeable with the same duty, if imported, as steel, or steel and iron combined, unless otherwise provided for.

Under the heading "Leather," in the item "sole and belting leather and all upper leather," after the word "sheep," and before the words "calf, tanned or dressed," strike out the words "buck and antelope," and substitute therefor the following item:

33. Glove leather, viz, buck, deer, elk, and antelope, tanned or dressed, colored or not colored, ten per cent. ad valorem. (10 per cent. ad valorem.)

35. Under the heading "Liquorice root, paste extract of, for manufacturing purposes," the duty of twenty per cent. to be reduced to fifteen per cent. ad valorem. (15 per cent. ad valorem.)

36. Under the heading "Marble," in the first item, after the word "containing," and before the word "fifteen," insert the words "less than," and after the words "cubic feet," and before the words "ten per cent.," strike out the words "or over." (10 per cent.)

37. In the second item, after the words "two sides," and before the words "per cent.," strike out the word "fifteen" and insert the word "ten." (10 per cent.)

38. Under the heading "Oils," in the item concerning "carbolic or heavy oil," after the word "oil," and before the words "ten per cent.," strike out the words "used in making wooden block pavements, for heating wood for building, and for railway ties," strike out the item "lubricating, of all kinds, twenty-five per cent. ad valorem—25 per cent.," and substitute the following:

39. Lubricating oils, composed wholly or in part of petroleum, and costing thirty cents per imperial gallon or over, twenty-five per cent. ad valorem. (25 per cent. ad valorem.)

40. The same costing less than thirty cents per imperial gallon seven and one-fifth cents per imperial gallon. ($7\frac{1}{5}$ cents per imperial gallon.)

41. All other lubricating oils, twenty-five per cent. ad valorem. (25 per cent. ad valorem.)

42. In the item "Paper-hangings or wall-paper," after the word "wall-paper," insert the words "and glazed, plated, marbled, enamelled, or embossed paper, in rolls or sheets, and cardboard similarly finished."

43. In the item "Union collar cloth paper," after the words "not shapen," and before the words "per cent.," strike out the word "ten" and insert the word "five." (5 per cent. ad valorem.)

44. In the item concerning "spices," after the word "unground," and before the words "per cent.," strike out the word "twenty" and insert the word "ten." (10 per cent.)

45. Under the heading "Tobacco," in the item "manufactured tobacco and snuff," after the word "twenty," strike out the word "five," also the figures "25," and insert the figures "20." (20 cents per pound.)

45a. In the item "trunks, satchels, valises," etc., after the words "carpet-bags," insert the words "purses and pocketbooks."

46. In the item "turpentine, spirits of," after the words "spirits of," and before the words "per cent.," strike out the word "twenty" and insert the word "ten." (10 per cent. ad valorem.)

47. Under the heading "Vegetables," strike out the words "tomatoes in cans two cents per pound," and substitute the following in lieu thereof, "tomatoes and other vegetables, including corn, in cans weighing not over one pound, two cents per can., (2 cents per can); and two cents additional per can for each pound or fraction of a pound over one pound in weight."

48. In the item concerning "vinegar," after the word "vinegar," and before the word "cents," strike out the word "twelve" and insert the word "fifteen." (15 per cent. I. G.)

49. Under the heading "Wools and woolens" in the first item, after the words "worsted yarns," strike out the words and figures "under number 30," and after the word "hosiery" and before the word "seven," strike out the words "of every description," and insert the words "not elsewhere specified."

50. In the second item concerning "clothing, ready made," after the word "including" and before the word "cloth caps" insert the words "knitted goods, viz, socks and stockings."

51. Dress or costume cloths, serges, and similar fabrics, under twenty-five inches wide and weighing not over three and a half ounces per lineal yard, either or both, twenty per cent. ad valorem. (20 per cent. ad valorem.)

By adding to Schedule A the following items, viz:

53. Absinthe, two dollars per imperial gallon. ($2 per I. G.)

54. Agates, sapphires, emeralds, garnets, and opals, polished, but not set or otherwise manufactured, ten per cent. ad valorem. (10 per cent.)

55. Aniline dyes, not otherwise provided for, ten per cent. ad valorem. (10 per cent.)

56 to 72. *Agricultural implements.*—Mowing machines, self-binding harvesters, harvesters without binders, binding attachments, reapers, sulky and walking plows and parts of the same, harrows, scythes, horse and hand hay rakes, garden rakes of any material, grain-seed drills, spades, and shovels, hoes, hay, straw, manure, spading and mining forks, and all similar articles and parts thereof, thirty-five per cent. ad valorem, to take effect on the 10th of May next. (35 per cent. ad valorem.)

73 to 78. Portable machines, portable steam-engines, threshers, and separators, horse-powers, portable saw-mills and fanning-mills and parts thereof, thirty-five per cent. ad valorem. (35 per cent. ad valorem.)

79. Bed comforters or quilts of cotton, twenty-seven and a half per cent. ad valorem. (27½ per cent. ad valorem.)

80. Bells, of any material, except for churches, thirty per cent. ad valorem. (30 per cent. ad valorem.)

81. Boot, shoe, and stay laces of any material, thirty per cent. ad valorem. (30 per cent. ad valorem.)

83. Button covers, crosier, ten per cent. ad valorem. (10 per cent. ad valorem.)

84. Cane or rattan, split or otherwise manufactured, twenty-five per cent. ad valorem. (25 per cent. ad valorem.)

85. Cases: jewel and watch cases, and other like articles of any material, thirty per cent. ad valorem. (30 per cent. ad valorem.)
86. Coal dust, twenty per cent. ad valorem. (20 per cent. ad valorem.)
87. Hair cloth, thirty per cent. ad valorem. (30 per cent. ad valorem.)
88. India-rubber clothing or clothing made waterproof with India rubber, thirty-five per cent. ad valorem. (35 per cent. ad valorem.)
89. Jellies and jams, five cents per pound. (5 cents per pound.)
90. Jute carpeting or matting and mats, twenty-five per cent. ad valorem. (25 per cent. ad valorem.)
91. Lampblack and ivory black, ten per cent. ad valorem. (10 per cent. ad valorem.)
92. Lead, nitrate, and acetate of, five per cent. ad valorem. (5 per cent. ad valorem.)
93. Magic lanterns and optical instruments, including microscopes and telescopes, twenty-five per cent. ad valorem. (25 per cent. ad valorem.)
94. Nickel anodes, ten per cent. ad valorem. (10 per cent. ad valorem.)
96. Pumps, iron, pitcher, spout, cistern, well and force pumps, thirty-five per cent. ad valorem. (35 per cent. ad valorem.)
97. Tin crystals, twenty per cent. ad valorem. (20 per cent. ad valorem.)
98. Vaseline, and similar preparations of petroleum for toilet, medicinal, or other purposes, in bulk, four cents per pound. (4 cents per pound.)

In bottles or other packages, not over one pound in weight each, six cents per pound. (6 cents per pound.)

Under heading "steel and manufactures of" strike out the first item concerning "Steel in ingots, bars, sheets and coils and railway bars or rails and fish plates," and substitute the following in lieu thereof:

99. Steel, ingots, bars, sheets and coils not elsewhere specified, a specific duty of five dollars per ton, to take effect on and after the first of July next, and to remain free of duty until that date. ($5 per ton.)
100. Spades, &c., strike out the words "including files" and add the following item:
101. Files and rasps, thirty-five per cent. ad valorem. (35 per cent. ad valorem.)
102. After the item concerning "proprietary medicines," and before the item concerning "prunella," insert the following:

"All medicinal preparations, whether chemical or otherwise, usually imported with the name of the manufacturer, shall have the true name of such manufacturer, and the place where they are prepared permanently and legibly affixed to each parcel by stamp, label, or otherwise; and all medicinal preparations imported without such names so affixed shall be forfeited." The alterations in customs duties, on the articles enumerated in the several items of this resolution, viz, from item 1 to 5 inclusive, 13, from 20 to 22 inclusive, from 24 to 44 inclusive, from 45*a* to 55 inclusive, from 79 to 98 inclusive, from 100 to 102 inclusive, shall take effect on and after the 20th April, 1883.

Resolved, That it is expedient to amend Schedule B of the said acts by the following alterations therein and additions thereto:

After the word "agates" strike out the word "unmanufactured" and insert the words "rubies, pearls, sapphires, emeralds, garnets, and opals, not polished nor otherwise manufactured." After the words "aniline dyes" add the words "in bulk or packages of not less than one pound weight."

Mineral waters, natural: "Under regulations to be made by the minister of customs."

After the words "celluloid or hyolite in sheets," add the words "lumps or blocks."

Under the heading "colors, dry" strike out the words "blanc fixe" and "mayacca" and add the words "metallic colors, viz, cobalt, zinc, and tin."

Diamond drills, for prospecting for minerals.

Dye, jet black.

Kainite, or German potash salts, for fertilizers.

Under the heading "Lumber and timber," after the word "chestnut," and before the word "mahogony," insert the word "gumwood," and after the closing word "manufactured" add the words "and sawdust of the same, *Provided*, that hickory lumber, sawn to shape for spokes of wheels, but not further manufactured, shall be also free."

Under the heading "Settlers' effects," after the words "removal to Canada" and before the words "not to include" insert the words "musical instruments, domestic sewing machines, live stock, carts, and other vehicles, and agricultural implements in use by the settler for at least one year before his removal to Canada," and after the word "machinery" strike out the words "or live stock," and after the words "entered as settlers effects" and before the words "shall not be sold" insert the words "cannot be so entered unless brought with the settler on his first arrival and."

So much of Schedule A as imposes any duty of customs on the following goods is hereby repealed, and the same are added to Schedule B of free goods, viz:

Asphaltum.

Books, bound, which shall have been printed more than seven years at the date of importation, except that foreign reprints of English copyrighted books shall be subject to the copyright duty.

Books printed by any Government, or by any scientific association, or other society now existing for the promotion of learning and letters issued in the course of their proceedings, and not for the purpose of trade.

Chronometers and compasses for ships.

Copper in sheets.

Hatters' plush, of silk or cotton.

Iron and steel, old and scrap.

Iron beams, sheets or plates and knees, for iron or composite ships.

Todine, crude.

Manuscripts.

Marble in blocks, from the quarry in the rough, or sawn on two sides only, and not specially shapen, containing fifteen cubic feet or over.

Newspapers: After the word "magazines," and before the word "unbound," add "and weekly literary papers."

Ottar of roses.

Platinum wire.

Seeds: anise, coriander, cardamom, fennel, and fenugreek.

Spurs and stilts, used in the manufacture of earthenware.

Sausage skins or casings, not cleaned.

Valerian root.

Wire of brass or copper, round or flat.

Wire of iron or steel, galvanized or tinned, 15 gauge or smaller.

Wire of spring steel, coppered, for the manufacture of mattresses, number nine gauge and smaller.

Strike the item concerning "steel in ingots, bars, sheets, and coils, railway bars, and fish plates" and insert the following:

Steel railway bars or rails, and fish plates, and in sheets for the manufacture of saws.

This resolution shall take effect on and after the 20th April, 1883.

Resolved, That it is expedient to provide by law that the export of deer, wild turkeys, and quail in the carcass be prohibited; and that a penalty be imposed for every breach of such prohibition.

LIST OF ARTICLES ON WHICH THE TARIFF WAS RAISED AT THE LAST SESSION OF THE DOMINION PARLIAMENT AND HOUSE OF COMMONS.

Acids.—Acetic, from 12 cents per imperial gallon to 15 cents per imperial gallon. Sulphuric and nitric combined and all mixed acids, twenty-five per cent. ad valorem.

Playing cards, from thirty per cent. ad valorem to six cents per pack.

Printed music, from six cents per pound to ten cents per pound.

Braces and suspenders, from twenty-five per cent. to thirty per cent. ad valorem.

Carriages—buggies of all kinds, farm wagons, farm, railway, or freight carts, pleasure carts or gigs, and similar vehicles, and all other carriages not otherwise enumerated, from thirty to thirty-five per cent. ad valorem.

Parts of carriages, from thirty to thirty-five per cent. ad valorem.

Lamp wicks, from twenty to thirty per cent. ad valorem.

Printed or dyed cotton, except jeans, coutilles, cambrics, silicias, and casbans, to twenty-seven and one-half per cent. ad valorem.

Cordage of all kinds, formerly from ten to twenty per cent. ad valorem, now twenty per cent. ad valorem.

Drain pipes and sewer pipes, glazed, from twenty per cent. to twenty-five per cent. ad valorem.

Show cases, a specific duty of two dollars each in addition to thirty-five per cent. ad valorem.

Bedsteads and other iron furniture, from twenty-five to thirty-five per cent. ad valorem.

Marble in blocks, in the rough or sawed on two sides, containing less than fifteen cubic feet, ten per cent. ad valorem.

Vinegar, from twelve cents to fifteen cents per imperial gallon.

Agricultural implements, from twenty-five to thirty-five per cent. ad valorem.

Boots and shoes, from twenty-five to thirty per cent. ad valorem.

Cases, jewel and watch cases, from twenty-five to thirty per cent. ad valorem.

Coal dust, from fifty cents per ton to twenty per cent. ad valorem.

India rubber clothing, &c., from twenty-five to thirty-five per cent. ad valorem.

Jute carpeting and matting, from twenty to twenty-five per cent. ad valorem.

Nickel anodes, formerly free, to ten per cent. ad valorem.

Steel, ingots, bars, sheets, and coils, a specific duty of five dollars per ton, formerly ten per cent. ad valorem.

Shovels, spades, files and rasps, hoes, hay, manure, and potato forks, rakes and rake teeth, carpenter's, cooper's, cabinet-maker's, and all other mechanics' tools, edge tools of every description, axes, scythes, and saws of all kinds, from thirty to thirty-five per cent. ad valorem.

NEW ARTICLES ADDED.

Children's carriages, thirty-five per cent. ad valorem.

Dress or costume cloths, serges, and simular fabrics, under twenty-five inches wide and weighing not over three and a half ounces per lineal yard, either or both, twenty per cent. ad valorem.

Absinthe, two dollars per imperial gallon.

Agates, sapphires, emeralds, garnets and opals, polished but not set or otherwise manufactured, ten per cent. ad valorem.

Bed comforters, or quilts of cotton, twenty-seven and a half per cent. ad valorem.

Button covers, crosier, ten per cent. ad valorem.

Cane and rattan, split or otherwise manufactured, twenty-five per cent. ad valorem.

Hair cloth, thirty per cent. ad valorem.

Jellies and jams, five cents per pound.

Lamp-black and ivory black, ten per cent. ad valorem.

Lead, nitrate and acetate of, five per cent. ad valorem.

Magic lanterns and optical instruments, including microscopes and telescopes, twenty-five per cent. ad valorem.

Pumps, iron, pitcher, spout, cistern, well and force pumps, thirty-five per cent. ad valorem.

Tin crystals, twenty per cent. ad valorem.

Vaseline, and all similar preparations of petroleum for toilet, medicinal and other purposes, four cents per pound; in bottles or other packages not over one pound in weight each, six cents per pound.

Aniline dyes, not otherwise provided for, ten per cent. ad valorem.

ARTICLES ON WHICH THE TARIFF HAS BEEN REDUCED.

Fruits dried, currants, dates, &c., from twenty-five to twenty per cent. ad valorem.

Sole and belting leather, and all upper leather, including kid, lamb, sheep, buck, deer, elk, and antelope, tanned or dressed, colored or not colored, calf, tanned or dressed, from fifteen to ten per cent. ad valorem.

Licorice root, part extract of, for manufacturing purpose, from twenty to fifteen per cent. ad valorem.

Marble slabs, sawn on not more than two sides, from fifteen to ten per cent. ad valorem.

Union collar cloth paper, from ten to five per cent. ad valorem.

Spices, from twenty to ten per cent. ad valorem.

Manufactured tobacco, from twenty-five to twenty cents per pound.

Turpentine, spirits of, from twenty to ten per cent. ad valorem.

OTHER CHANGES.

The importer of cotton duck, used for sails of ships or fishing boats or other vessels, shall be entitled to a drawback equal to the duty paid thereon, less five per cent. of the value of the article, on furnishing proof that the duck had been so used, under regulations to be made by the minister of customs.

In the item, "Fruits in air-tight cans," after the words, "including cans," strike out the words "three cents per pound if sweetened, and two cents per pound if not sweetened," and insert the words: Weighing not over one pound, three cents per can, and three cents additional per can for each pound or fraction of a pound over one pound in weight.

All articles rated as iron or manufactures of iron shall be chargeable with the same duty if imported as steel, or steel and iron combined, unless otherwise provided for.

Lubricating oils, composed wholly or in part of petroleum, and costing thirty cents per imperial gallon or over, twenty-five per cent. ad valorem.

The same costing less than thirty cents per imperial gallon and seven and one fifth cents per imperial gallon.

All other lubricating oils, twenty per cent. ad valorem.

In the item "Trunks, satchels, valises, &c.," "purses and pocket books" are added.

Under the heading "Vegetables," strike out the words "tomatoes in cans two cents per pound," and substitute the following in lieu thereof: "Tomatoes and other vegetables, including corn in cans, weighing not over one pound, two cents per can, and two cents additional per can for each pound or fraction of a pound over one pound in weight."

Under the heading "Wools and woolens" in the first item, after the words "Worsted yarns," strike out the words and figures "under number 30," and after the word "hosiery," and before the word "seven" strike out the words, "of every description," and insert the words "not elsewhere specified."

In the second item concerning "clothing ready made," after the word "including" and before the words "cloth caps" insert the words "knitted goods, viz: socks and stockings."

After the item concerning "proprietary medicines," and before the item concerning "prunella," insert the following: "All medicinal preparations, whether chemical or otherwise, usually imported with the name of the manufacturer, shall have the true name of such manufacturer and the place where they are prepared permanently and legibly affixed to each parcel by stamp, label or otherwise; and all medicinal preparations imported without such names so affixed shall be forfeited."

ADDITION TO FREE GOODS AND CHANGES.

Agates, rubies, pearls, sapphires, emeralds, garnets, and opals, not polished nor otherwise manufactured.

Aniline dyes in bulk or packages of not less than one pound weight.

Mineral waters, natural.

Celluloid or hyolite in sheets, lumps or blocks.

Colors, dry, viz: blue-black, Chinese blue, Prussian blue, and raw umber. In pulp, viz., carmine, cologne, rose lakes, scarlet and maroon, satin and fine-washed white, and ultra-marine blue. Metallic colors, viz, cobalt, zinc and tin.

Diamond drills for prospecting for minerals.

Dye, jet black.

Kainite or German potash salts for fertilizers.

Lumber and timber, plank and boards, sawn, of box-wood, cherry, walnut, chestnut, gum-wood, mahogany, pitch-pine, rose-wood, sandal-wood, Spanish cedar, oak, hickory, and white-wood, not shaped, planed, or otherwise manufactured, and sawdust of the same: provided that hickory lumber, sawn to shape for spokes of wheels, but not further manufactured, shall be also free.

Settlers' effects, viz, wearing apparel, household furniture, professional books, implements and tools of trade, occupation or employment, which the settler has had in actual use for at least six months before removal to Canada, musical instruments, domestic sewing machines, live stock, carts and other vehicles, and agricultural implements in use by the settler for at least one year before his removal to Canada, not to include machinery, or articles imported for use in any manufacturing establishment, or for sale: provided that any dutiable article entered as settlers' effects cannot be so entered unless brought with the settler on his first arrival, and shall not be sold.

The following goods are added to the list of free goods:

Asphaltum.

Books, bound, which shall have been printed more than seven years at the date of importation, except that foreign reprints of English copyrighted books shall be subject to the copyright duty.

Books printed by any Government, or by any scientific association or other society now existing for the promotion of learning, and letters issued in the course of their proceedings and not for the purpose of trade.

Chronometers and compasses for ships.

Copper, in sheets.

Hatters' plush, of silk or cotton.

Iron and steel, old and scrap.

Iron beams, sheets or plates, and knees for iron or composite ships.

Iodine, crude.

Manuscripts.

Marble in blocks, from the quarry in the rough, or sawn on two sides only, and not specially shapen, containing fifteen cubic feet or over.

Newspaper, and quarterly, monthly and semi-monthly magazines and weekly literary papers, unbound.

Attar of roses.

Platinum wire.

Seeds, anise, coriander, fennel and fenugreek.

Spurs and stilts, used in the manufacture of earthenware.

Sausage skins or casings, not cleaned.

Valerian root.

Wire of brass or copper, round or flat.

Wire of iron or steel, galvanized or tinned, fifteen gauge or smaller.

Wire of spring steel, coppered, for the manufacture of mattresses, number nine gauge and smaller.

Strike out the item concerning "Steel in ingots, bars, sheets and coils, railway bars and fish plates," and insert the following:

Steel railway bars or rails, and fish plates, and in sheets for the manufacture of saws.

The export of deer, wild turkeys, and quail in the carcass is prohibited.

PAUL LANGE,
Consul.

UNITED STATES CONSULATE,
Saint Stephen, N. B., June 9, 1883.

AMERICAN NAVIGATION BETWEEN SOUTHERN ASIA AND THE UNITED STATES.

REPORT BY CONSUL STUDER, OF SINGAPORE.

I have written so many reports upon the commerce of Singapore and the colony of the Strait's Settlements with the British Suzerian Malay States adjoining the latter, and all the countries and islands of Southern

Asia, of and for which Singapore is the great trade center and transshipment depot, that I have to be careful of not falling into the error of repeating things or subjects already reported upon, such as utter absence of American firms, American steamers, modes of commerce and opening trade, competition, international good-will or friendship, or indifference, &c., which remain as unchanged, some in whole and others in part, as they always have been since I came here.

But in some things and some respects there is a dawning, in others an improvement, a progress. And I know of but one subject in which, I regret to say, a certain movement threatens us more than at any time since I first came here, viz, *American navigation* of sailing vessels, and therewith direct trade between the United States (the Pacific coast with East Asia less affected) and all Southern Asia, including the Indo-Malayan Archipelago, and this simply and chiefly by reason of the steady increase of large foreign steamers going from port to port, and beginning to go to ports formerly either not or seldom visited by steamers, to pick up what freight they can find. And new steamers, now being constructed, are announced. True, sailing vessels are sailing vessels regardless of nationality—all will suffer from the effects of increased steam navigation, But, as we have comparatively fewer steamers than any maritime nation of note, it will fall heaviest upon American ship owners.

But that is not the only danger existing and threatening. I have, upon careful reflection, reason to fear (not to lose sight of the so-called European "trades-union") that the repeal of the statute, enacted in 1865, imposing a discriminating duty of 10 per cent. ad valorem on all goods, with very few exceptions, produced or grown in countries east of the Cape of Good Hope, when imported into the United States from ports or places lying west of the Cape of Good Hope, in addition to any duty thereon already existing, will have an injurious effect upon American navigation, firstly, and in various other and important ways, secondly.

This law, as I understand it, was enacted, not only for the purpose of assisting and fostering American navigation, but also to protect American importers, trade, and consumers alike at home against European speculators who would have the choice of trying their own and our markets, and in most cases also having the benefits of the markets of the East (subjects, mostly, of countries having colonies in the East) for purchasing through their own branch firms or agents, and for effecting a large portion of the purchases through the barter of European fabrics—goods generally. If, for instance, a firm in London or Amsterdam, having agencies in the East, found itself with large consignments of Eastern products on hand and the local market depressed, but that better prices ruled in New York or Boston, it always had to study, first, whether it would pay to ship the same to our shores and pay the 10 per cent ad valorem on the same; in other words, the American importer had a margin of 10 per cent. ad valorem on his importations from the east, *direct*, versus the speculators in Europe dealing in the same articles. Nor could a vessel freighted out here with products (under a charter "to discharge in either a European or one of our ports") go to St. Helena or the British Channel for orders, without subjecting the entire cargo to 10 per cent. ad valorem discriminating duty, if ordered to discharge in the United States; and this simply because the destination of the goods was unknown on clearing from the port of loading in the East, and only ascertained at a port *west* of the Cape of Good Hope after both the markets of Europe and the United States had been tried—the best market ascertained. It is true that from year to year, accordingly as steamers increased. more and more was shipped (with a preferment for certain products) from the East to the United States *via England, for transshipment there*, without the exaction of the 10 per cent. ad valorem, when the goods were shipped under a "through bill of lading" and the shipper in the East annexed a sworn declaration to his invoice to the effect that the goods should not be offered for sale in Europe while in transit to the United States, and it seems, judging from reports received here occasionally, that in instances, regardless of the sworn declaration, the invoiced goods were not really destined for the American port mentioned in the shipper's declaration and were offered for sale or sold in Europe (at the cost of perjury). There was, therefore, in a measure a difficulty in knowing whether the 10 per cent. discriminating duty could be collected in certain instances with justice, or in accordance with the meaning or tenor of the law.

My opinion always has been, becoming steadily more confirmed through the increase of foreign steamers to the manifest injury of American sailing vessels, that the 10 per cent. discriminating ad valorem duty should be collected in each and every instance where goods were sent to Europe for transshipment there to the United States, regardless of the sworn declarations to invoices that the goods were destined for New York (or other American port) and should not be offered for sale in Europe while in transit to America. Why? Because I believed and argued that if the said statute establishing the 10 per cent. special duty was enacted for the purpose, in part, of assisting, increasing—*protecting* American sailing vessels, it failed to be effective in that respect, and threw the benefit of it, to the extent mentioned, on foreign steamers. I see no reason to change my opinion in the premises.

It is true at the same time that quantities of produce were shipped on foreign steamers coming from China and bound for New York *direct*, via the Suez Canal. In such instances the 10 per cent. discriminating duty law could not have been applied, regardless of opinion and damage to our sailing vessels. It must be remembered that in 1865, when this law was enacted there was no Suez Canal, and that, if there had been one, the framers of the law would probably have shaped it differently—perhaps that a certain percentage of duty should be levied on all Eastern goods carred on foreign steamers through the said canal to the United States. The latter not having colonies, nor trying to have any, and just emerging from a gigantic war, so dreadfully ruinous to our foreign commerce from causes which I need not mention, would, I think, have been entitled to some such enactment. Any reciprocity proclaimed in like manner by any foreign maritime power could not have affected us in the least, as we had no steamers, and in case we should have *them*, it could then be repealed. Had this been done, I feel certain that we might have had a larger amount of sailing vessels profitably engaged and that many of the complaints about extra wages, big fees, and unsuitable or unpleasant shipping laws would have been less frequent or loud than is the case now.

Notwithstanding the injury resulting to American vessels on account of steamers, the 10 per cent. special ad valorem duty tended to maintain a direct trade with the United States; and a fair number of sailing vessels, though at much lower freight rates than formerly, still found employment and did pretty well when arriving out here with cargoes (petroleum from New York especially) and when not having to lay idly at anchor too long waiting for a suitable charter.

There are a few firms here, large and wealthy, who for many years had been the consignees of American vessels, as well as the purchasing agents of colonial produce for large firms in the United States, and which, also, when American vessels brought American goods of a salable nature, effected as good sales as possible for them, as well as made it their business to load these vessels with produce back to the United States; or else, if the tonnage in the harbor exceeded the local demand for produce for America, obtained favorable charters for them for ports in Europe or coastwise trade, or sent them in ballast to the Phillipines to load there for their agents to the United States.

And of late years, when the demand for petroleum steadily increased and other American goods found favor in this market, some of the vessels freighted with petroleum also brought at low freight rates (just what our manufacturers need for success) other goods which could not take damage in consequence of being in the same hold with petroleum; and I was very glad to notice that it stimulated direct trade with increasing tendency. It was such a great contrast to former years, when I first came here, when American vessels (and foreign as well) imported no petroleum, and, when sent from our country direct, only anthracite coal to serve as ballast (which sold badly), together with tobacco, ship stores (not much), and a few articles in small quantities to try the market, served as cargo. Imports from our country at this port increased largely during the last two or three years, as compared with former years, and this not only of articles such as petroleum, which, in order to be good, had to be drawn from our country, but other articles of manufacture or production which in former years were either imported from Europe or not dealt in at all, to all of which I shall allude further on under the heading of "Imports."

And now I have been informed, in no way officially, but through merchants here, through letters received by them from their correspondents in the United States, leaving us room for doubt, that this discriminating duty of 10 per cent. ad valorem was repealed by Congress during its last session, and this without substitution of some law to take its place in any degree. Information had reached me from time to time that it was intended to repeal said law, but I could not believe it, could be at least not without substituting a new law at the same time, still more effective. But after all it was repealed, and it is far from me to criticise an act of Congress and the motives that prompted the repeal of said act. But I hope it will be found pardonable if, in the interest of American commerce and the extension thereof, I point out what effects, in my honest opinion and to the best of my judgment, the repeal of the said act will have, or be likely to have.

I have long been aware that to some exporting firms dealing in produce the said law was either an eye-sore or that they were very anxious that our Government might repeal it, complaining that the latter was too restrictive, since they could not ship produce to their branches or agents in London or Liverpool without producing consular invoices for the same here (in whole or in part) in case their agents there saw fit to ship to the United States, and then not without swearing that the said goods would not be offered for sale in Europe while in transitu, if they did not want to pay the 10 per cent. special duty. What they wanted was entire freedom of action to ship in any way they liked, seek the best market, and ship thither without paying any extra duty on account of it, and present consular invoices here or in Europe at their option, and without caring in the least whether American commerce and navigation would suffer in consequence of their having their wishes. Many were the unpleasant or out-of-place remarks I had to listen to upon this subject, and I generally met them by retorting with, "Don't ship to the United States if you find it in any way inconvenient; our business men will be able to effect their purchases nevertheless." What they wanted was to have the benefit of two markets, Europe and America. If they did not, they never would have objected to subscribing and swearing to a declaration of the tenor that the invoiced goods were *bona fide* destined for the American port mentioned in the invoice, and not to be offered for sale in any cisatlantic market. The more they objected the more I became convinced that the 10 per cent. discriminating duty was a measure protecting American commerce. Indeed, I was told that anything was taken advantage of (so to say, every loophole tried) to try both markets *before* presenting invoices for certification, as, for instance, as follows: When it was known that a steamer was about to arrive from China, or when signaled as coming in, and bound for London or Liverpool, a firm (or firms) would apply to the steamer's agent to send a certain quantity of produce in her, and received a permit to ship. Now, it would happen occasionally that a steamer would lie here from twenty-four to forty-eight hours or over, so that a firm could avail itself of this space of time to try the markets of London and New York by telegraph, and, if the latter was better, to present invoices before me, headed with, "Consigned to order in New York." Accordingly, I increased the severity of the sworn declaration so as to read: "That the invoiced goods had not been and would not be offered for sale in any European market from the time they were sent on board the steamer and while in transit to New York." Through bills of lading? I had reason to fear that they were not very important documents under the circumstances, and this class of firms just alluded to never invited reciprocal trade from our country.

Now, such of the firms here as made trade with the United States their chief object, especially by loading American vessels, and showing a willingness not only to export to, but also to import, by *sailing vessels*, therefrom any kind of goods which they had reason to think they would sell, new goods never tried and old goods already established, and to receive any consignments American exporters were willing to intrust to them for introduction, having at the same time the advantage of cheap freight (sail *vs.* steam, via Europe), told me that they deeply regretted the repeal of said 10 per cent. discriminating duty act; that now London (and Amsterdam and Rotterdam for the Dutch colonies) would be the chief market for eastern produce and supply the United States; that from this colony all the tin, also pepper and other spices, gums, nearly all the articles the Straits produce, except gambier, tapioca, sago, and rattans, would be sent there by steamers, preparations and engagements tending that way having been made and were still being made; and that very few sailing vessels for direct shipments to America would find employment, and would then have to lie a long time before completing cargo; and that the prices of products in the East (the country of production) would be chiefly shaped after London and Amsterdam quotations; that the probable effect would be that vessels arriving in the East with petroleum from America, or coals from England or Australia, or in ballast, seeking freight, would find much less employment than formerly, and probably would have to go in ballast to our Pacific coast to load grain, or to the Chincha Islands to load guano, and that this might cause a result, that much of the petroleum from America and coal from England (the latter, *coals from England by steamers*, I reported to the Department nearly a year ago, as pretty strongly inaugurated), and other American goods would come here in steamers.

Upon my question as to what would be the effect if American importers of Eastern goods refused to buy them in Europe, every household in America consuming more or less of Eastern products (coffee, tea, spices, sugar, &c.), and would continue to buy through their duly established agents in this part of the world, they say that many of the importers in America (which is true) were not Americans, but the resident agents of firms in Europe with branches in the East, with plenty of capital to back them; in other words, "a united action by all importers to import from the East direct only, could not be reached." After this discussion I ask them, But what will the dealers in Eastern produce in England or Holland say when they find that an American consular officer in any of their ports, now that this 10 per cent. discriminating duty has been repealed from and after January 1, 1883, cannot give his certificate to invoices calling for Eastern colonial products by reason of a consular regulation based upon a statute which says that "All invoices of importations from countries in which there are United States consular officers must be produced before and authenticated by the United States consular officer nearest the place of shipment for the United States," &c.? This rather takes them by surprise, and they ask me, "Supposing you were consul in England and a firm there produced before you an invoice of Malacca tin after new year, would you refuse to certify to it?" My answer is, "As I regard and explain the law, in the absence of special instructions from my Government, I think I would have to, unless the firm producing it, in addition to proving under oath the original cost of the tin in Malacca and all the charges thereon on any account whatsoever from the time it was bought in Malacca, would further swear and subscribe that it was not aware that after January 1, 1883, their purchasing agent in Singapore or Penang (nearest place to the field of production) would have to produce an invoice for goods destined for the United States before the consular officer at that port;" or, "that at the time of shipment of the tin in Singapore or Penang their shipper was not aware that it would be sent to the United States; I fail to see how, in order to be as right as possible, I could act in a manner different from what I have stated." "England," I continue, "is not the country of production, and since there are United States consular officers in Singapore, Penang, Batavia, Padang, Soerabaya, Bangkok, &c., such an invoice should be produced before the consul nearest to the place of production or shipment; he is the best judge of the market prices and charges of invoiced goods." "But," I am asked in return, "supposing firms in Europe know nothing about such statutes and regulations." "Then," I answer, "let them go to the nearest American consul for the required information; all questions relating to shipments to the United States, duties thereon, &c., can easily be ascertained in Europe or in the East, and in a very short time, too, and when I am informed officially of any change in or repeal of a law regarding the same, it is my duty to inform the exporting firms of the same without delay."

The statute just alluded to tends to make them thoughtful, and if the Government will put the same construction upon it as I have in the foregoing I think that the repeal of the 10 per cent. discriminating duty law will have done no particular harm to American commercial interests, beyond lessening receipts by the United States Treasury to the extent the collection of the said duty would have yielded, and this latter, as concerns the commonwealth, would be largely counterbalanced by great odds through the benefits our navigation and commerce would receive through *direct trade* with the East—with the races and peoples inhabiting the same, and ruled over, a large portion of it, by the same people that would have us buy Eastern goods in their own markets in Europe, and who have a great deal of fault to find with us for not also repealing our protective tariff, in order to have our people also buy from them various articles of manufacture which we can make just as well and often better than themselves.

And must it not occur to any reflecting person what a direct gain there must be by our people, the consumers, in a direct trade with the East as regards the colonial products alone, instead of the indirect traffic via Europe (with Europe in Europe)? It lies in a nutshell: A vessel can be chartered and freighted out here at so much per ton, say from Singapore to New York (or for a lump sum, to fill the vessel, as occurs occasionally), and the charges for bagging, boxing, and handling the goods, inclusive of lighterage, until put on board are paid once, and insurance is paid on the cargo for the round voyage, and there the matter practically ends. To buy the same goods in Europe, the cost of the goods and all the charges (there is but little difference between the freight rates hence to Europe or America) I have just mentioned remain the same, and, naturally, there must be additional charges in Europe for unloading, handling, carrying to a warehouse and warehousing, wharf or warehouse insurance, and, finally, the entire cost of transshipment to an Atlantic steamer and freight to America. And it is not to, be supposed that in a European port the merchants, with their clerks, and the brokers, &c., live on thin air and hopes for a better world. No, they want a commission or a profit; and there are port charges and what not, all to be added to the original cost in the East. And foreign steamers carry the goods, earn the freights, while our sailing vessels in the East have to lie idly at anchor, "wait for something to turn up," or go in ballast across the broad Pacific. And through all this, instead of coming nearer to direct banking with the United States in the East, we are drifting further from it; and London must more than ever become the money center of the world.

The question then is, which would have been better and more beneficial for us, to continue paying 10 per cent. ad valorem duty on Eastern goods when imported into the United States from ports or places west of the Cape of Good Hope, or to buy the largest portion of Eastern products in Europe at European quotations, and pay no 10 per cent. discriminating duty; not losing sight of the fact at the same time that the 10 per cent. thus collected would be disbursed by the United States Treasury for public purposes at home, while the profits and charges on the goods in Europe, which our people have to pay, stay there.

Let it be remembered too, that in most cases European capitalists control and rule the mercantile firms, traders, and, not unfrequently, European planters in the East, and not the latter the former, a fact in itself very important.

I hope we will soon have a goodly fleet of *American* steamers; and when we have, but not until then, the repeal of the 10 per cent. discriminating duty would not affect American commerce seriously.

Having expressed my opinion as to how American navigation will likely be affected through the repeal of said law, I know of but little to say that I have not stated and dwelt upon in former annual reports relative to ownership and masters of vessels, seamen, wages, and regulations and laws regarding the same. I am aware that urgent demands have been made by American ship owners and masters for a radical change of the present shipping laws. I believe, myself, that a modification in some instances, and a radical change or an abolition in other instances, might be of advantage. But there are certain issues which cannot be passed over, and must be squarely met in some effectual way. Among these I count (1) the relief of destitute seamen; (2) the protection of all seamen who wish to be or become American seamen, as nearly as lays within their power, in foreign ports; (3) cruel and unusual treatment of seamen by their officers; (4) some effective mode for restraining, controlling, and punishing bad, mischievous, and malicious seamen in the course of a voyage; (5) to protect a ship more effectively at any foreign port against the impositions of persons who ship and draw heavy advances when shipping as seamen, when they are either no seamen at all, or not that which they represented themselves to be (this would include rascally shipping-masters who knowingly or indifferently engage such persons and bring them to the shipping office to sign the agreement or on board of a vessel after clearing); (6) summary punishment of ship-masters who are found to be dishonest, officially, to any one, and given to perjury or misrepresentation under oath; (7) some better, more effective way to protect a consul against the ebullitions, contempt, and disobedience of ship-masters while endeavoring to carry out the prescribed laws and regulations fearlessly and impartially.

It is my confirmed opinion that the most carefully selected body of law-makers will never succeed in enacting laws that will suit all the ship-masters, even if among them, the law-makers, were ship-masters or naval officers. A long experience at this far distant port has convinced me that a ship-master may find a certain law good and wise, and that soon after another one may condemn it radically, or half approve or half condemn, as the case may be. So, for instance, while the majority of ship-masters condemn the three-months'-extra-wages law, there have been here ship-masters who said they hoped it would never be repealed, and they were, all of them, old and experienced—of many years' service, possessed of great discretion. A bad ship-master will condemn anything that does not suit him, and will prove, too, very expensive to his owners in the long run, though they may often enough hardly find out why and how the money was paid, and, it is almost needless to say, that seamen will give vessels commanded by such masters a wide berth whenever it lies in their power. A good, law-abiding ship-master, honorably inclined and humane in his feelings towards and dealings with those under him, will control his officers, allow no cursing and filthy language, and have no trouble on board; and he will prove profitable and creditable to his owners and an honor to the flag that waves over his vessel. When he has trouble on board by reason of ruffians and mischief-brewing seamen, it can very easily be ascertained where the fault lies, and he will be fully protected. Sometimes, let a ship-master try what he may, one or more of his officers will disobey him by ill-treating seamen, and it can also be ascertained where the fault lies. And occasionally both the master and sailors request the discharge of a brutal mate; but, while the consul would gladly comply with such a request, two difficulties are experienced, viz: firstly, the law requires a mate to be an Amercan citizen under a penalty; and, secondly, very often no substitute of our nationality can be found (or, perhaps, of any nationality). This law, therefore, requiring American citizenship in a mate, is, however well intended, very awkward at far distant ports—call it impracticable in a great measure—and leads to resorting to falsehoods on shipping articles.

All considered, as I look at it after years of almost uninterrupted experience, I find that under the present laws a good, law-abiding and discreet ship-master can get along nicely and peaceably as a master of any other nation of like character; and sometimes, shipmasters, very good men indeed, would get along better and cheaper if they had more discretion, control of temper, and occasionally better education and more useful information. Occasionally bad men command American vessels, and I feel somehow that their owners must have known that, while being able navigators and seamen, as well as good business men, they were on general principles not fit to be placed in charge of men.

I am *sure* American ship-owners could do much towards a reduction of expenses by their masters and mitigation of wrongs on shipboard while abroad if they would promptly refuse to employ a bad, doubtful, ill-reputed ship-master (as well as mates); while thus benefiting themselves directly, they would also honor the flag by so doing. True, there is less bad treatment practiced on American ships than in years gone by, but there is *enough left.* The trouble is, too, that the most notorious ship-masters (and mates too) are often enough (too often) not reached by the strong arm of the law. The payment of three months' extra wages is often enough "not a circumstance" to the brutal treatment meted out to the seamen. In many ports there is no treaty under which extradition can be had for brutal officers, and the consuls have no judicial power; and though they may report a bad master, with an account of his deeds, to the Department, he will leave the ship before she gets home and join another one belonging perhaps to the same owners, and of which perhaps the last master also *left* to escape well-deserved punishment at home.

There is one more matter to which I would refer earnestly, viz, the difference made between American and foreign seamen in certain respects. Under the law, as construed in the consular regulations (upon decisions by law officers), foreign seamen "when shipped in a foreign port to be discharged in a foreign port," are not entitled to extra wages. That the owners of vessels have derived much benefit from that law, or, rather, "exception in the law," cannot be denied; and I would not want to discourage it or find fault with it when this can be effected without causing a seaman to become utterly destitute, except for one important item, viz: That it induces very frequently masters of vessels to do all they can to avoid shipping *de facto* "American seamen" on the same articles with foreign seamen, in fact to engage their services at all, unless willing to pass as foreign seamen. This has never occurred here, but I have been told several times, and have reason to believe, that where seamen who have been shipped in the United States and were discharged in a foreign port from an American vessel, and again ship in an American vessel, they are entered as foreign seamen, and are not wanted if they insist upon a distinction being made between them and *de facto* foreign seamen not shipped in the United States; and that cases have occurred where actual American citizen seamen, for the sake of getting employment and not to be rejected, allowed themselves to be entered on the articles, under the heading of "place of nativity," as foreigners, to enable the master not to pay extra wages for them on being discharged. That such things have occurred I know—there can be no doubt about it—and I consider it my duty to mention it.

There is another matter I wish to report upon, finding it is a hardship upon owners and masters of vessels which might be easily abolished by legislation, with every sense of justice, and give great satisfaction to all parties concerned, as follows:

It has happened often since I have been here that Chinamen, Japanese, Manilamen, and men of other eastern races, were shipped in the United States (as well as in foreign ports, on shipping articles stipulating for the voyage to end in the United States) as cooks, stewards, and seamen, on the same shipping articles with American seamen, "for a general freighting voyage to any part of the world and *back* to a port of discharge in the United States," for a term of about (most generally) twenty-four calendar months. Now, my experience, with few exceptions, has been that when vessels carrying such seamen arrived here, the latter being now near their homes, after, generally, long absences, they would ask to be discharged on the plea of wishing to go home; and this being a very natural request, and other seamen easily obtainable, the masters were generally willing to let them go. But then and there appeared the difficulty of my having to demand extra wages, as required by law, they shipping on American articles of the kind above mentioned. True, they could waive receiving two months' extra wages, but one month's would have to be paid, and, often enough, they offered to pay it themselves and all expenses of discharging them and shipping other men in their places. Now, I have always set my face against a seaman himself paying one month's extra wages out of his hard-earned pay, besides the law failing to sanction any such proceeding. But I have said to masters, who, however willing to let a man go, naturally saw no reason why they should pay extra wages, that what I required was the payment of all the regular wages due them, and then one month's extra wages, and that they sign waivers for two months' extra wages; that this done, and after having been discharged and receiving from me *all* of the arrears of wages due them, if they were then willing to refund to the master the equivalent of one month's extra wages and the fees for discharging and shipping, all of their own free will and accord, that it was nothing to me. This condition was sometimes accepted mutually, and carried out. But it always seemed to me, (1) that such mariners should be shipped in the United States (and in foreign ports) on separate articles, stipulating that if the ship should arrive at a port in the East and the subscribers should wish to go home, they could, by "mutual consent," be discharged without extra wages, otherwise to return to a final port of discharge in the United States; and (2) that neither the master and owners, nor any seaman of that class, when applying for his discharge (at his own request) under such circumstances, should be put to any extra expenses without having any just complaints against the ship or being prevented from performing his duties by reason of physical disability.

These people want no extra wages, and never become a charge upon the consulate for relief. The moment they are discharged they disappear among the masses of their countrymen. They are at home here, and can help themselves where a white man would nearly starve. To the best of my recollection, I never had more than one Chinaman, a cook, on relief, and he was sent to me with a shipwrecked crew, having lost all he had.

A. G. STUDER,
Consul.

CONSULATE OF THE UNITED STATES,
Singapore, December 29, 1882.

AMERICAN VS. HUNGARIAN PORK IN GERMANY.

REPORT BY COMMERCIAL AGENT SMITH, OF MAYENCE.

The anathema recently thundered by the German Government against all swine and swine flesh of American origin, while very disadvantageous to the United States, is welcome tidings to neighboring countries. This measure, adopted under the pretence of excluding from the empire a dangerous food, appears to Americans and to a large portion of the people of Germany to have been devised solely with a view to benefit a few at the expense of the many; but from Hungary and other parts of Europe this article of food can be procured at cheaper prices than are ruling in Germany, and the farmers of the empire, in whose interest the act was undoubtedly decided upon, will probably not reap as great an advantage therefrom as they expected. The people of the Rhineland, who will be great sufferers from this unjust measure, are very much annoyed to think that their Government should have taken such a step. At the time it was suggested, much opposition was manifested in the Reichstag and by Boards of Trade, &c., and there is now much complaint among the people. The laboring classes of Germany seldom have meat, and they have depended very largely upon pork on account of its cheapness as a flesh food, but even the poor boon of a mess of pork once a week it seems is to be denied them. Germany is unable to produce flesh enough to supply the demand of her people, and especially in the Rhineland and in Westphalia is this inability most apparent. A very good market has consequently recently arisen in these districts for Hungarian swine, which can be brought to Cologne at a cost of $3.80 per head. We may, therefore, look forward to a new agitation for an increased tariff on pork, or a repeal of the obnoxious provisions against American swine after a while.

JAMES HENRY SMITH,
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,
Mayence, March 26, 1883.

TRADE AND CUSTOMS OF THE RIVER QUANZA.

REPORT BY CONSUL DU VERGE, OF ST. PAUL DE LOANDO.

Having been compelled to change air by reason of sickness, I made a little trip up the Quanza River as far as Dondo, which took me nine days.

The Quanza River forms the southeastern boundary of the Portuguese province of Angola, although it is claimed by them to possess the whole country from latitude south 5° to latitude south 19°. The source of the Quanza is unknown as yet.

From Dondo to the Bar is the great commercial highway of Angola, but it is only navigable for small craft. The control of said river by steam navigation was obtained by the late Mr. Silva, the United States commercial agent, and has been kept ever since under the name of "Quanza Steam Navigation." That grant will expire shortly and leave open to some enterprising American a gold field of immense value.

Trade of all sorts is very brisk at the different factories on the right bank of the river, the left one being still in the hands of the natives, who will allow no Europeans to settle there. An exception is the small fortress (and a Catholic church), now almost in ruin, of Muxima, held by the Portuguese, but no trade comes to that place.

Dondo may be called the heart or capital of the interior of the province of Angola. To Dondo the Portuguese traders and planters of Cajengo, Golingo-Alto, Ambaca, Pingo, Andongo, and Malange send their coffee, wax, rubber, ivory, &c., to be shipped to Loando.

It is to Dondo only that the natives from the right bank of the Quanza bring their gingula, palm-oil, hides, urzella, &c., to be bartered for cloth, powder, arms, rum, and quincailleries.

The two seasons are as follows: The winter from June to the middle of October, and summer from middle of October to the beginning of June. In winter, "also called the dry season," there is no rain but heavy dews during the night, and with the sun generally obscured by clouds until 9, 10, and 11 a. m. The temperature is agreeable, the thermometer seldom rising above 23° R. in the shade. The summer or rainy season is more properly divided into two seasons, "the small rain and the big rain." On the 18th of October, when we have seen the sun in our zenith, small showers begin to fall in the afternoon until the 22d day of December, when the sun attains its greatest southern declination; from that date until the 24th of February, when we again have the sun at our zenith, the weather remains changeable, while in March and April the rains come down in torrents of sometimes twelve and sixteen hours' duration, inundating the country and swelling the rivers.

The banks of the river as well as the bar shift yearly after the rainy season is over, owing to the strong current occasioned by the heavy rain. During the dry season a flood-tide is felt as far as Bom-Jesus, while in the rainy season a current runs constantly down with a velocity of from 4½ knots at Dondo to 1½ knots at the bar.

It is unhealthy on the banks of the river, fever and liver complaint being the prevailing diseases, especially in the rainy months. The Quanza is full of fish, alligators, and hippopotami; when the river has overflowed its banks and subsides again into its own bed, the effluvia from the ground becomes very dangerous to Europeans as well as to the natives.

It is remarkable that the natives suffer more from fever than Europeans, by reason, I believe, of their mode of living, which is entirely on faniha and fuba, and poison themselves with the vile stuff called rum and trade gin imported by European traders.

In Cajengo, Pimgo-Andongo, Golimgo-Alto, and Ambacca, fevers are almost unknown; while the climate of Malange is almost European, wheat growing and being cultivated now with great success.

Two years ago a terrible epidemic of small-pox decimated the native population, while not a single European was attacked by it.

In case of sickness a native generally distrusts European treatment and medicines, but prefers to be slowly doctored to death by his own countrymen and superstitions.

When dead the common negro is buried anywhere, maybe a few yards from the door of his cubata, or in the middle of the road.

Sobas, or native chiefs, are interred with more ceremony. For three months the corpse is kept above the ground, sitting in a chair, and daily enveloped in new pieces of cloth, which are stolen during the night by his former subjects. After this lapse of time he is deposited in his grave, two grown-up slaves being decapitated and their bodies being interred with him, as well as a boy and girl, both alive, the former holding the soba's pipe and the latter a vessel with water. Although I have never been an eye-witness of this barbarism, and though it is officially contradicted, I firmly believe that it is still practiced, and would have gone with my informant to one of these burials if I had been well and had time to spare.

Another barbarism not yet abolished is judgment by fetish (which I have witnessed more than fifty times on the west and southwest coast), viz, the accused, to show his innocence, deliberately swallows a certain amount of deadly vegetable poison; if he vomit it he is innocent, but if his stomach retains it he is guilty of the crime imputed to him, and dies.

When a soba dies his successor is not allowed to continue the works which the deceased may have begun, or to inhabit his residence, nor does he inherit his furniture, plate, or anything; on the contrary, whatever unmovable goods, houses, &c., belong to the deceased are allowed to fall into ruin, while all movable goods are stolen by his subjects immediately after death. For a whole year the spirit of the deceased is supposed to reign, his successor having no power whatever; the whole kingdom or tribe remains, therefore, in a state of anarchy.

This custom impedes to a great extent the prosperity of the native tribes, as whatever one chief may have done for his people his successor is obliged to annihilate.

Next to Dondo, the most important places on the Quanza are: Massangano (fortress trade and cane plantations on the Lucala); Bocca de Quanza (trade principally palm oil, fiber, and live stock); Coffeecaulha (trade principally coffee, palm oil, and rock salt); Conga (trade principally cotton and fiber); Bom-Jesus (large cane plantation, distilling about 11 puncheons of trade rum per day); Calembo (Portuguese Chefado, but otherwise unimportant); and Tombe, as a firewood depository.

The right bank of the Quanza, which is extremely fertile and well cultivated, is lined with native villages where Europeans are forbidden to enter. At the bar of the Quanza, on a long sandy spit of land surrounded by thickly wooded marshes, the Quanza Company has established its depot and steamers headquarters, having about 20 to 25 white men from England as engineers, boiler-makers, carpenters, &c., and over 100 blacks, they having quite a little village, and a marine railway put up where they repair their steamers when needed.

L. De R. Du VERGE,
Consul.

UNITED STATES CONSULATE,
St. Paul de Loando, West Coast of Africa.

TRADE OF RIO JANEIRO.

PRINTED STATEMENT SHOWING THE IMPORTS AND EXPORTS OF RIO DE JANEIRO, TRANSMITTED TO THE DEPARTMENT BY THE LEGATION IN THAT CITY.

RIO COMMERCIAL REVIEW OF 1882.

EXPORTS.

COFFEE.

The year 1882 commenced with a stock of 226,000 bags and a flat market, the latter owing to unfavorable advices from consuming centers and the anticipation of an early increase in the receipts. This latter expectation was not at once realized, owing to several interruptions in the railway traffic in January, February, and March, caused by continuous heavy rains, but after the end of March a heavy supply commenced coming in and continued until the middle of December, when the receipts became again smaller, planters holding back their coffee in order to profit by the reduction in the railway freight tariff, to take effect on January 1, 1883.

The total receipts during 1882, though they are not quite as large as those of 1881, are yet considerably larger than those of any one of the preceding years, amounting to 4,172,298 bags, or 11,431 per day, against 4,491,507 bags, or 12,306 per day, in 1881; 3,385,186 bags, or 9,249 per day, in 1880; 3,741,645 bags, or 10,251 per day, in 1879; 3,019,022 bags, or 8,271 per day, in 1878; 2,839,429 bags, or 7,779 per day, in 1877.

The whole of this large supply was disposed of during the year, the stock on January 1, 1883, being calculated at 205,000 bags.

The value of the article in this market has fluctuated up and down according to the influences above referred to, but each little rise has been followed by a greater fall, and the final result at the end of the year is a decline of 610 to 750 reis per 10 kilograms, compared with the value at the beginning of the year, as will be seen from the following quotations:

Per 10 kilograms.	January 1, 1882.	December 31, 1882.
Superior	4$500 — 4$700	3$750 — 3$950
Good first	4$150 — 4$200	3$470 — 3$540
Regular first	3$750 — 3$900	3$060 — 3$200
Ordinary first	3$400 — 3$550	2$660 — 2$860
Good second	2$950 — 3$150	2$250 — 2$450
Ordinary second	2$400 — 2$650	1$770 — 2$040

The clearances during the year 1882 amounted to 2,450,759 bags for United States, against 2,160,481 in 1881; 1,457,951 bags for Europe, against 1,905,241 in 1881; 4,921 bags for Canada, against 580 in 1881; 100,410 bags for Cape of Good Hope, against 102,502 in 1881; 47,018 bags for River Plate and Valparaiso, against 48,796 in 1881; a total of 4,061,059 bags, against 4,217,600 bags in 1881, showing a decrease of 156,541 bags, compared with the clearances in 1881, viz, 447,290 bags decrease to Europe; 2,092 bags decrease to Cape of Good Hope; 1,778 bags decrease to River Plate and Valparaiso; 290,278 bags increase to United States; 4,341 bags increase to Canada.

For further details as to clearances and receipts we refer to the following comparative tables:

Clearances of coffee from Rio during the years 1882, 1881, *and* 1880.

Destination.	1882.	1881.	1880.
UNITED STATES.	*Bags.*	*Bags.*	*Bags.*
New York	1, 709, 712	1, 446, 726	1, 109, 673
Baltimore	437, 578	351, 996	444, 975
Hampton Roads (f. o.)	....	115, 758	12, 712
Richmond	22, 718	7, 000	....
Charleston	840	....	3, 500
Savannah	21, 917	24, 254	19, 126
Mobile	13, 002	21, 579	8, 850
New Orleans	167, 565	241, 143	206, 807
Galveston	76, 427	52, 025	17, 300
St. Thomas (f. o.)	....	....	4, 000
San Francisco, Cal	1, 000	....	....
	2, 450, 759	2, 160, 481	1, 827, 036

Clearances of coffee from Rio during the years 1882, 1881, *and* 1880—Continued.

Destination.	1882.	1881.	1880.
EUROPE.	*Bags.*	*Bags.*	*Bags.*
Channel (f. o.)	10, 700	33, 271	18, 500
Havre	73, 790	224, 328	201, 846
Antwerp and Rotterdam	114, 382	274, 518	134, 595
Hamburg, Bremen, and Baltic	513, 748	528, 723	399, 917
Liverpool, London, and Southampton	218, 420	284, 248	239, 082
Bordeaux	33, 808	88, 828	72, 831
Lisbon (f. o.)	93, 442	120, 210	112, 797
Portugal	5, 223	12, 571	2, 909
Mediterranean	394, 438	338, 493	245, 664
	1, 457, 951	1, 905, 241	1, 428, 141
ELSEWHERE.			
Canada	4, 921	580	....
Cape of Good Hope	100, 410	102, 502	79, 446
River Plate and Valparaiso	47, 018	48, 796	46, 926
	152, 349	151, 879	126, 372
TOTALS.			
United States	2, 450, 759	2, 160, 481	1, 827, 038
Europe	1, 457, 951	1, 905, 241	1, 428, 141
Elsewhere	152, 349	151, 878	126, 372
Aggregate	4, 061, 059	4, 217, 600	3, 381, 551

Total clearances of coffee from Rio during the last nine years, in bags of 60 *kilograms.*

Years.	United States.	Europe.	Elsewhere.	Total.
1882	2, 450, 759	1, 457, 951	152, 349	4, 061, 059
1881	2, 160, 481	1, 905, 241	151, 878	4, 217, 600
1880	1, 827, 038	1, 428, 141	126, 372	3, 381, 551
1879	2, 242, 488	1, 121, 130	90, 341	3, 453, 959
1878	1, 653, 582	1, 091, 717	138, 771	2, 884, 070
1877	1, 637, 633	1, 043, 995	99, 910	2, 781, 538
1876	1, 429, 610	1, 219, 127	80, 469	2, 729, 206
1875	1, 987, 191	1, 041, 383	93, 461	3, 123, 035
1874	1, 502, 825	1, 031, 104	96, 887	2, 630, 816

Total clearances of coffee from Rio during the six months from July 1 *to December* 31.

Destination.	1882.	1881.	1880.
UNITED STATES.	*Bags.*	*Bags.*	*Bags.*
New York	975, 853	860, 657	720, 434
Baltimore	252, 546	205, 379	276, 212
Hampton Roads (f. o.)	....	15, 758	2, 212
Richmond	22, 718	3, 500	....
Charleston	....	....	3, 500
Savannah	7, 751	18, 448	14, 516
Mobile	9, 500	13, 034	8, 850
New Orleans	132, 619	159, 861	165, 700
Galveston	54, 935	41, 525	17, 300
St. Thomas (f. o.)	....	....	4, 000
San Francisco, Cal	1, 000	....	....
	1, 456, 922	1, 318, 162	1, 213, 724
EUROPE.			
Channel (f. o.)	3, 000	3, 000	3, 600
Havre	38, 314	85, 448	148, 605
Antwerp and Rotterdam	88, 720	113, 958	85, 472
Hamburg, Bremen, and Baltic	326, 112	291, 700	243, 790
Liverpool, London, and Southampton	164, 989	137, 061	151, 132
Bordeaux	23, 996	38, 414	49, 344
Lisbon (f. o.)	63, 500	62, 260	85, 956
Portugal	1, 932	4, 484	2, 416
Mediterranean	317, 000	180, 101	193, 394
	1, 027, 563	916, 326	963, 709

Total clearances of coffee from Rio during six months from July 1 *to December* 31—Continued.

Destination.	1882.	1881.	1880.
ELSEWHERE.	*Bags.*	*Bags.*	*Bags.*
Canada	1,538	580	....
Cape of Good Hope	58,292	60,935	48,419
River Plate and Valparaiso	27,573	22,528	29,555
	87,403	84,043	77,974
TOTALS.			
United States	1,456,922	1,318,162	1,213,724
Europe	1,027,563	916,326	963,709
Elsewhere	87,403	84,043	77,974
Aggregate	2,571,888	2,318,531	2,255,407

It appears from these tables that, although the total clearances of 1882 were 156,541 bags less those in 1881, those of the last six months of 1882 exceeded those of the same period of 1881 by 243,357 bags, and those of the same period of 1880 by 316,481 bags.

Receipts of coffee at Rio during the last six years, in bags of 60 *kilograms.*

Months.	1877.		1878.		1879.	
	Total.	Daily average.	Total.	Daily average.	Total.	Daily average.
January	229,738	7,411	233,827	7,543	211,582	6,825
February	184,526	6,590	194,293	6,939	287,977	10,285
March	236,278	7,622	157,373	5,077	315,936	10,191
April	231,831	7,728	109,634	3,654	291,004	[illegible]
May	155,781	5,025	121,493	3,919	353,123	11,391
June	130,052	4,335	176,405	5,880	212,936	[illegible]
July	242,604	7,826	243,701	7,861	299,975	[illegible]
August	294,969	9,515	330,108	10,649	404,688	[illegible]
September	364,106	12,137	373,675	12,456	318,196	[illegible]
October	336,032	10,840	403,467	13,015	410,224	[illegible]
November	236,448	7,882	366,020	12,201	377,056	[illegible]
December	197,064	6,357	309,026	8,969	259,796	[illegible]
	2,839,419	7,779	3,019,022	8,271	3,741,645	10,251

Receipts of coffee at Rio during the last six years, in bags of 60 *kilograms*—Continued.

Months.	1880.		1881.		1882.	
	Total.	Daily average.	Total.	Daily average.	Total.	Daily average.
January	153,264	4,944	323,896	10,448	241,697	7,797
February	133,903	4,997	409,558	14,627	109,252	3,902
March	198,196	6,393	373,470	12,047	188,942	6,095
April	161,580	5,386	310,183	10,399	368,722	12,291
May	127,132	4,101	371,385	11,980	267,686	8,635
June	121,501	4,050	252,773	8,426	212,512	7,084
July	253,541	8,179	336,984	10,870	240,500	7,758
August	427,174	13,780	433,034	13,969	457,499	14,758
September	491,097	16,370	551,229	18,374	609,568	20,319
October	461,828	14,898	472,365	15,238	510,962	16,483
November	421,835	14,061	364,627	12,154	600,657	20,022
December	423,135	13,750	292,003	9,419	364,301	11,752
	3,385,186	9,249	4,491,507	12,306	4,172,298	11,431

It will be seen from the above table that the receipts in September and November of last year were the largest ever known, reaching a daily average of 20,319 bags in September, and 20,022 bags in November.

IMPORTS.

Bran.—Arrivals in 1882, 63,992 bags, against 59,460 in 1881; increase, 4,532 bags. In January the market opened firm at 2$800—3$ per bag, and the firmness continued till end of March, prices having gradually advanced to 3$600—3$800. Since then the fluctuations in the value have been but unimportant, and at the end of December the market closed firm at 3$400—3$600 per bag.

Cement.—Arrivals in 1882 109,979 casks, against 57,500 in 1881; increase 52,479 casks. In view of the heavy supply prices of English cement declined during the year about 800 reis per cask, and those of German about 200 reis, those of Boulogne being unchanged. The closing quotations were:

English	7$000—7$200
German	6$400—6$600
Boulogne	7$800—8$000

Coals.—Arrivals in 1882, 235,115 tons, against 224,551 in 1881; increase, 10,564 tons. The bulk of the arrivals having been on order for account of companies, quotations remained purely nominal during the whole year, and those we here give must be considered equally so, viz:

Newcastle	19$000—20$000
Cardiff	21$000
Sundries	16$000—17$000

Codfish.—Arrivals in 1882, 57,706 tubs and cases Canadian and 13,075 cases Norwegian—total, 70,781 tubs, and cases, against 75,504 in 1881; decrease, 4,723 tubs, and cases. The market opened at 22$—26$ for tubs in retail, prices advancing in April to 27$—28$ for tubs and 25$—26$ for cases, the market continuing firm throughout the year, the closing quotations being 25$—30$ for tubs and 26$ for cases.

Flour.—The arrivals during 1882 were 402,967 barrels, against 398,710 barrels in 1881; an increase of 4,257 barrels. The value in the market fluctuated but little during the year, and the closing prices were about the same as at the beginning of the year, viz:

Richmond:	
First	22$500—22$500
Second	21$500—21$500
Baltimore:	
First	21$000—21$500
Second	20$000—20$500
Interior	19$000—19$500
Saint Louis	19$500—20$000
Castilla	21$000—21$500
Canadian	21$000—21$500
Chile	17$500—18$000
River Plate	18$500—20$000

The market closed firm with a stock in first hands amounting to about 15,000 barrels.

Hay.—Arrivals in 1882, 31,032 bales, against 29,110 in 1881; increase, 2,022 bales. Prices opened in January at 71—75 reis per kilogram for Rosario, declining in February to 65—68 reis, to 60 reis in April, and to 58—60 reis in May, but advancing in June to 65 reis, in July to 70, in August to 75, and in September to 78 reis. In November the market became flat and prices declined gradually, the closing quotation at the end of December being nominally 65 reis per kilogram for Rosario.

Kerosene.—Arrivals in 1882, 255,775 cases, against 260,645 in 1881; decrease, 4,779 cases. The prices paid at the beginning of the year were 7$—7$100 per case for Devoe's Brilliant, but during the year they declined gradually but steadily, the market closing flat at 6$200—6$300 per case.

Lard.—Arrivals in 1882 were 49,912 kegs and 155 cases, against 75,386 kegs and 340 cases in 1881; decrease 25,474 kegs and 185 cases. The quotations for George's brand at the beginning of January were 445—450 reis per pound. In view of the decrease in the supply from the United States, prices advanced to 465—475 reis in April, 510—520 in June, declining again to 490—500 in July. In August a steady upward movement set in, and in November as much as 600 reis was paid. In December the market became less firm and prices of George's brand receded to 530 reis per pound, which was the closing quotation.

Indian corn.—Arrivals in 1882, 114,084 bags, against 136,838 bags in 1881; decrease, 22,754 bags. The market in January opened firm at 4$800—4$900 per bag, and as the demand exceeded the supply, prices advanced in February to 5$200—5$300 per bag. Afterwards, owing to competition by native produce, prices declined again, and sales were effected in March at 4$600—5$000, in April at 4$000—4$200, in May at 4$300—4$400. In June, the supply of native produce having diminished, prices advanced to 5$300, the market continuing firm during July and August at 5$000—5$300. In October, sales were effected at 4$600—4$800, in November at 5$000—5$100, and December at 5$600—5$800, at which quotation the market closed firm and with a good demand.

Rosin.—Arrivals in 1882, 9,341 barrels, against 8,342 in 1881; increase, 999 barrels. Prices advanced in the course of the year about 1$ per barrel, the quotations in January having been 8$500—9$000 per barrel, and from July to December 10$ per barrel.

Turpentine.—Arrivals in 1882, 5,037 cases, against 4,338 in 1881; increase, 699 cases. Prices opened in January at 600—650 reis per kilogram, declined to 580—600 in March, advanced again to 640 in May, a gradual decline commencing in June until 480—500 reis was reached in August, which latter prices ruled until November, when a reaction set in, the market closing firm in December at 560 reis per kilogram.

Pitch pine.—Arrivals in 1882, 8,088,765 feet, against 8,168,490 feet in 1881; decrease, 79,725 feet. The market opened firm at 43$500—44$ per dozen; gradually declined to 38$ in May, advanced again to 41$ in June and 42$ in beginning of August, declining again to 40$500 at the end of that month. At the end of October 41$ was paid, which price ruled until end of November, when an active demand sprang up and prices advanced to 46$ per dozen, at which quotation the market closed firm at the end of the year.

White pine.—Arrivals in 1882, 2,442,069 feet, against 3,924,146 feet in 1881; a decrease of 1,482,077 feet. At the beginning of the year 1882, our market was fully supplied and prices ruled at 105—110 reis per foot. Heavy supplies having continued to come in during January and February, prices receded to 95 reis per foot, advancing again to 105 reis in March and 110 in April. Nothing having arrived from April 15 to June 22, 120 reis was paid for a lot arrived on the latter date, 115 reis for one arrived on July 14, and 110 for one August 6, since which date prices remained stationary at 110—112 reis per foot, until the end of

September, when 115 reis was again reached, 120 reis being paid from October till the end of the year, the market closing very firm and with an upward tendency.

Spruce pine.—Arrivals in 1882, 3,471,052 feet, against 1,356,834 feet in 1881; increase, 2,114,218 feet. The supply during the year having been far in excess of the demand, the value of the article in our market has considerably declined. A cargo arrived on February 4 was sold before arrival at 38$ per dozen, another one on April 29 fetched 35$, and since that date prices gradually declined to 27$—28$, at which the last sales in the year were effected, the market being flat and oversupplied.

Swedish pine.—Arrivals in 1882 25,472 dozens, against 14,544 in 1881; increase, 10,928 dozens. The article suffered from the same influences as spruce pine, namely, an oversupply.

In the beginning of the year 41$ per dozen was paid, prices declining gradually until 26$ was reached; towards the end of the year some reaction set in, and the market closed steady at 30-36, according to quality and assortment.

We take the following summaried extracts from the Jornal do Commercio Commercial Retrospect of 1882:

In 1882 trade was not prosperous; on the contrary the hard times noted in the preceding year, and which appeared to indicate approach towards a liquidation, became still more accentuated.

The cause was not merely the constant fall in coffee, though undoubtedly this was the most noisy one; there were others still graver, chief of which was that substitution of slavery each day coming nearer, which repeated lamentable incidents during the year, showed the necessity of preparing for more rapidly than was at first anticipated.

Spontaneous immigration, though more numerous in 1882, is as yet a mere drop of water on the thirsty land, and although Asiatic immigration has many bitter enemies here, it is imposing itself as the only expedient that can be relied on.

Labor, however, although the principal question, is not the sole one. Threatened in our solitary branch of industry, we see clearly that a country cannot confine itself to agriculture, still less to coffee alone, and the long neglect of the economic interests of the country is now a powerful cause of its commercial depression.

The state of the public finances has no less contributed to this state. Deficits, more or less disguised, have become habitual in the budgets, and the loans, foreign and home, made to balance them have added to the expenditure and consequently augmented the subsequent deficits. Indubitably a great part of the outlay has been on material improvements of much necessity and we do not propose to stop suddenly in the development of ways, but we think that it would be of good effect to stay the execution of such works for some years. But perhaps a special budget, endowed with the sum needed for interest and amortization of a loan for public works and aid to the sources of production, together with rigorous avoidance of decreeing the least extraordinary outlay unless accompanied with the resources for its realization, would permit the balancing of the ordinary revenue and expenditure and do away with the deficits that are undermining the national credit.

Still more urgent is the reform of the currency, the permanent cause of the fatal oscillations in exchange which disturb all commercial business. The question is difficult, still more so in the present situation, but the inconveniences of the paper money are so grave as to demand immediate attention to the matter. Perhaps, before attempting the more radical measure, it would be well to give greater value to the currency by reducing its quantity, reducing it 10,000,000$ per annum until the superabundance had disappeared, when a loan might be made to provide for convertibility.

But it is a matter of observation that at certain times of the year money becomes scarce at Rio, and therefore the contraction produced by calling in of paper money might have injurious effects. The best means of avoiding such effects of the contraction would be temporary issues of currency to the banks, on loan upon public stocks, as in May, 1875.

In presence of questions so momentous and requiring early solution the trade of Rio has commenced to limit its operations. Simultaneously the plantation labor has become dearer and the price of its product has declined, the fall, which began in coffee in 1880, having augmented in 1881 and become considerable in 1882. Trade, therefore, had various difficulties to contend with in 1882 and, consequently, it was dispirited and apathetic. The limited business certainly gave rise neither to large profits nor to grave losses and no important failures occurred.

In like manner the intermediaries saw their customers decrease and orders from the interior diminish. Life becoming dearer, everyone cuts off luxuries to secure necessities. However, the dealers were unusually regular in their payments, although their returns were in many cases delayed.

The elevation of the additional duties from 50 to 60 per cent., if a necessity of the moment, weighs further on the import trade, and, though perhaps not seriously felt, may tend to still greater contraction of foreign importation, as it will burden beyond reasonable limits some articles already highly taxed. The custom-house storage also has been violently raised, and henceforward the storage for the second month will be intolerable.

In exports the losses were heavier, affecting various branches of trade directly, and the considerable decline in coffee has reached all classes.

Besides the coffee exhibitions promoted by the Centro de Lavoura e Commercio, whose beneficial effects will be felt both in the producing plantation and in the consuming market, and the lectures initiated by the same association, a reduction of 2 per cent. in the export duties on coffee, sugar, cotton, and maté was voted by the legislature, and reductions of 15 to 25 per cent. have been put in force on the D. Pedro II Railway in regard to coffee, besides other reductions in favor of agriculture, and some other railways have pursued a similar course.

With such aids coffee planting may be relied on to traverse the present crisis.

The law of November 4, 1882, upon the establishment of anonymous societies or companies, though containing some perhaps impractical provisions and even some oversights, is still an advance upon the law of 1860, which atrophied the spirit of association; and in like manner the law of October 14, 1882, on patents, in substitution of that of 1830, constitutes an improvement and gives further guarantees to property in inventions. Unfortunately legislation failed in regard to the urgently required reform of the mortgage laws, especially as to forced adjudication of the property in execution to the creditor, the fear of which repels capital from employment in loans on mortgage.

The following table shows that the foreign trade of Rio, which supplies more than half the custom-house revenue of the nation, yielded in 1882 1,577:629$ less than in 1881, and, indeed, has been almost stationary for several years:

Rio custom-house collections.

Year.	Importation.	Exportation.	Total.
1882	32.880:495$	7.133:232$	40.013:727$
1881	32.346:129$	9.245:227$	41.591:356$
1880	33.319:825$	9.531:170$	42.850:995$
1879	31.954:997$	9.800:327$	41.755:324$
1878	32.145:492$	8.533:268$	40.678:760$
1877	29.553:716$	9.522:640$	39.076:356$
1876	30.182:137$	8.370:488$	38.552:625$
1875	30.042:965$	9.750:793$	39.973:750$
1874	31.774:853$	8.914:348$	40.689:201$
1873	29.627:214$	8.912:631$	38.539:846$
1872	28.433:518$	7.458:212$	35.891:730$

Calculating on the basis to the duties, the value of the imports into Rio in 1882 were about 96,000:000$, about the same as in 1881, and that of the exports was 83,000:000$, or 20,000:000$ less than in 1881.

The imports of cloths increased in 1882, but the sale was not in the same ratio, notwithstanding the willingness of importers to make reasonable concessions.

The following shows the imports of packages of dry goods in 1881 and 1882:

Description.	1881.	1882.
	Packages.	*Packages.*
Cottons	41, 096	45, 243
Woolens	6, 185	6, 747
Linens	1, 558	1, 879
Silks	175	167
Made up	1, 128	2, 245
Totals	50, 142	56, 281

The extreme rates of exchange in 1882 were 20⅛ *d* and 22 *d*. It reached its lowest point in January, kept dull in March, improved a little in April to July, weakening again, and after attaining 22 *d* in November declining in December to 21 *d*.

The public funds kept firm during the year, the 6 per cent. Apolices Geraes reaching 1:080$ per conto. This firmness was not due so much to the employment therein of savings as to the temporary investment of money which in better commercial conditions would have sought employments more useful to the owners and to the country. The Share market was steady, and undisturbed by speculations.

Money was abundant at the beginning of the year, got scarce in April and May, but again became easy up to the end of the year. The demand, however, was relatively small, in the general absence of speculation and with a diminished commercial movement.

During 1882 the sales of 6 per cent. Apolices Geraes were 12,828 at the extremes of 1:050$ to 1:080$, against 1:015$ to 1:090$ in 1881.

Of 5 per cent. Apolices, which rarely come on the market, the only sale was 2:400$ at 80 per cent.

The gold bonds of 1868 and 1869 naturally vary in currency price with exchange. Those of 1868 are mostly localized, and those of 1879, being negotiable in other cities of Brazil and in London, Paris, and Lisbon, and being mostly in Europe, have in general little movement in Rio. Of the 6 per cents 433 were sold at the extremes of 1:270$ and 1:300$. Of the 4½ per cents the sales were 764 at the extremes of

1:145$ and 1:200$, 500 of which were, it was understood, acquired as a basis for exchange operations.

The 6 per cents had become reduced by amortizations to 23,588:000$ at the end of 1882, and the 4½ per cents to 46,721:500$.

During 1882 bonds of the provinces of Rio de Janeiro, Pernambuco, Minas Geraes and Rio Grande do Sul were negotiated and, especially those of Rio de Janeiro, were well received. The province of Paraná had also issued 632:000$ of 8 per cent. bonds of 500$ to bearer, with at least 5 per cent. annual amortization, but none had reached the Rio market up to the end of the year.

Of the Rio de Janeiro bonds the sales were from par to 103, those of Pernambuco at par, those of Rio Grande do Sul at 90 to 100, and those of Minas at 103 per cent.

Only two small lots of the Rio 5 per cent. Municipal Loan came on the open market, one in May at 92 and the other in September at 88.

The business in gold was very limited and much less than in 1881, it not exceeding 490,000 sovereigns, at the extremes of 11$160 and 11$950.

Hypothecated bills maintained a good position throughout the year, and though less business was done than in 1881 both the 5 per cent. Banco do Brazil and the 6 per cent. Banco Predial have a sure market, they serving both small and large capitalists and yielding higher interest than the banks allow in account current. Of Banco do Brazil 12,000, against 31,000 in 1881, at 89 to 96; and of Banco Predial 29,000, against 31,000 in 1881, at 74½ to 81½ per cent.

Some small lots of the 6 per cent. bills of the União dos Lavradores were sold at 80 to 82 per cent.

Shares moved with much steadiness in 1882 and with one or two exceptions without speculative variations, but some that in 1881 had obtained exaggerated quotations returned gradually in 1882 to more warranted prices.

COMMERCE OF SANTOS, BRAZIL.

REPORT BY CONSUL WRIGHT.

With the simple reference to my despatch number 94, dated 10th instant, I now transmit such reports as I have been able to make up relating to the commerce of this port and province, as well as some remarks of my own, and respectfully submit them for your consideration.

Several of the inclosures are cuttings from one or the other newspapers published here, and are reliable.

I inclose tables as follows:

W, with its annex, will show you the destination and quantity of coffee, together with the estimated invoice value in Federal money, exported during the year that ended with 30th June last. Annex A also shows the quantity of coffee in tons and bags exported during the past ten years, which is worthy of attention, showing, as it does, an increase in ten years of nearly 300 per centum.

B shows the number and nationality and tonnage of steamers and sailers cleared out at custom-house. Their respective destinations are also shown, as well as whence they came, but the number of steamers and vessels entered and the tonnage in port on 30th June, 1882, and 1883, respectively, are not given, because, perhaps, such could not be obtained at the imperial custom-house at the time or since. That cleared is sufficient to show the tonnage movement of the port, as what was left in port on 30th June, 1882, will be found to be more or less balanced by what remained on 30th June, 1883. As far as our own flag is concerned the movement was as follows:

	Tons.
In port 1st July, 1882, 1	292
Arrived in 1882-'83, 5	1,831
Sailed in 1882-'83, 6	2,223

As against a grand total of 683 vessels measuring 447,511 tons.

N, with its annexes V and G, shows the value in milreis and Federal money, weight and destination of all articles exported during the past year.

P shows the quantity of several soil products exported in 1881-'82, and the official value thereof, say reis 41,782,750$297, as also comparative table of the export of coffee during the past, or previous four years; the amounts given as duties do not represent the actual *export duty* but the total revenue received by the *province* in connection with exports, and other sources, at the provincial custom-house here. The official value of all exports in 1882-'83 is reis 34,043,400$994, as per inclosure N, or a loss on that of 1881-'82 of reis 7,739,349$303. The official value of coffee was in 1881-'82 reis 39,890,967$836, against reis 33,458,227$027, or difference of reis 6,382,740,$509.

R is the "return of trade" as per form No. 130, but only shows for exports, as the character and value of imports I am quite unable to furnish. The quantity and value given for coffee does not agree with the "invoice book" exactly, because some parcels were shipped direct and via Rio de Janeiro, the invoices of which were not presented at this consulate.

C.—Amount of revenue received by the imperial custom-house during two years past, less the tax on slaves or emancipation fund.

D.—Amounts received from all sources of revenue by the imperial and provincial custom-houses, during the half year ending 30th June last.

T.—Shows the amount of import and export *duties* as we understand the word, received by the imperial and provincial custom-houses during the fiscal years 1881-'82 and 1882-'83.

A casual glance over the above-named inclosures will show the progress made by this province and that my predictions emitted from time to time have been more than verified, especially as to the production of coffee, the receipts of which during the year amounted to nearly 2,000,000 bags, leaving at least 300,000 bags on the plantations yet to be sent down, irrespective of the crop now being gathered. This latter, it is expected, will yield up to, perhaps, 2,000,000 bags, and I firmly believe that, had it not been for the drought about last November, the yield would be 2,500,000 bags. That dry spell, and the fact that many old plantations were weakened by bearing two successive heavy crops, somewhat more than checked what, under favorable influences, would have been the natural progressive increase. Whether planters can or will gather, prepare and market all, whether the general quality will be good, are questions which prudence suggests, and should be left for the future to decide. One fact my experience has made patent to me is, that the planters of this province are not surpassed by any in any part of the world for intelligence, natural and educated, and an instinctive perception, amounting often to stubbornness, which has caused, and will continue to cause them to watch, not be caught by, but avail of the manipulations of speculators abroad to their own benefit. They are to a great extent free of debt, as planters, as those who owe money in many instances, owe it as shareholders of railroads, banks, &c.; many of them, also, are capitalists, themselves residing in the cities and towns in the interior, while their commission merchants here are as a rule wealthy in real estate and marketable marginal property as security against bank loans. All this will serve to show you why I think planters will not permit themselves to be cornered by foreign rings, although some of them or their agents, it is believed, in attempting to not be caught, have caught themselves and have paid, or will have to pay, dearly for going outside of their legitimate functions as commission merchants, to become exporters, and thereby falling into the meshes of the very ring they wished to avoid. These shipments have not been made directly, but through the medium of regular houses here, who, under their letters of credit for which they alone are, and are able to be, responsible, have made advances on invoice cost; but however strong the consignees abroad may be, it is well known that they will not be hampered by instructions, but consult their own convictions and convenience, while it is well known that such shipments soon become known abroad, and, to use a vulgar expression, are "spotted."

I do not think that the area of coffee plantations will be materially increased in the near future. There must be now in this province perhaps a thousand farms and plantations of coffee, producing from 500 to 80,000 arrobas (an arroba is about 32½ pounds). It appears to me that these sensible planters have come to the conclusion that they have planted coffee enough, have seen that it is not "king," that they have to prepare for an event which they desire and know how to prepare for and gradually accomplish, far better than others know for them or will be permitted to interfere with. Every day, almost, evidences acts all over the province showing what these people intend and will do, of and by themselves.

My belief is, while that the acreage of plantation will not be materially increased, the old trees as they die away will be, as I know they have been, replaced, so that, barring climatic effects, the normal supply will be unaltered.

It is not the intention of the planters to depend upon coffee as heretofore. They have seen the necessity of economy. Formerly they let all the extra fruits of their farms or plantations fall and rot on the ground, because they did not like "quitanda" or "hucksterage," or more aptly "garden sales," preferring to buy such at high prices coming from abroad or from other provinces, through Santos and on to them by rail, cart, or pack-mules.

A little over a month ago I went for a trip up country with the view of benefiting my health and of discovering the actual condition of coffee plantations. I went over two hundred miles by rail into a new district into which the railroad entered but a few months ago, and twenty miles beyond which a branch has since been opened to traffic, the completion of which latter some large planters were waiting for, to begin sending off their coffee long held back. The opinions I have often before and herein expressed regarding this province were much strengthened by what I saw and heard during this excursion. The plantation upon which I stopped was ten years ago about two weeks' travel from here, and almost a virgin forest when the present owner bought it for about eight thousand dollars, our money. His last crop of coffee yielded him 12,000 arrobas, which has placed him almost out of debt, his present crop will not yield much less, and although the money value may be less, he will be master of all he surveys. I rode with him through his coffee field, the soil of which, although loose, is so rich that the least moisture hardens it so that heavy rains wash over it, and soon after is loosened again or pulverized, so that with the toes a little hole may be opened, the seed of maize, beans, &c., thrown in by hand, covered up by the foot, soon after to produce fruit such as the northern part of New Jersey or North Carolina cannot surpass in the number of enormous stalks to the hill, the number of grains on the cobs, in the one case, and the bunches of and the fruitfulness of the pods in the other. I have seen Indian corn there produced, also hay, nearly as good as we at home produce; rice is grown there; butter, such as you can eat only on the farms at home; yet, this gentleman had foreign butter on his table, supposing, perhaps, that I would prefer it to that which his wife had caused to be made, and which was about just what our mothers had made when we were boys. This gentleman told me that his wife had sold the last year 500 milreis worth of fruits, and expected to sell double this year. He told me that one tree had produced 1,500 mangoes, which I thought to be exaggerated until he took me to the tree growing in the midst of his coffee-bushes. The management of this plantation, as well as of one next to it, appeared to me to be well organized in every way compatible with circumstances and native sense and kindly instincts. As the day closed, the slaves came home, each bringing a bundle of fire-wood or fagots, or basket of oranges or limes, or a baby, and were then marshaled, when the master, with bared head, recited an evening prayer, all accompanying him, after which they were dismissed to their supper of milk and mush, and to what seemed to me comfortable quarters.

The owner of this plantation is a member of the provincial legislature, and with his wife and daughters compose as intelligent and pretty a family as can be met with anywhere.

The above may show you what a new plantation is. I forgot to mention that a four horse-power steam-engine was used there for driving coffee and other machinery. Older plantations are much better mounted.

Cotton cannot be grown for foreign markets, but its cultivation is more than likely to increase for supplying home wants. the manufacture of coarse cloth having been and is being extended but I have found it difficult to obtain reliable data as yet to forward to the Department of Agriculture as requested.

The cultivation of sugar is also increasing, and that of wheat is being tried; indeed there seems to exist a decided growing determination on the part of the people of this province to avail themselves of its natural resources more than ever before, and thus become more and more independent of the sister provinces, neighbors, and foreign countries for supplies of much, agricultural and manufactured, which they themselves can produce and manufacture. And yet, while we see all these signs of internal and material improvement, we may, ere many years, be without a port in which our increasing export and import trade can be carried on. Liverpool and New York or Hamburg would have been, and be, proud of and cherish a port with such natural advantages, and Havre would pay to-day millions for such facilities; yet this port is being allowed to fill, or, more properly, slough up, and to such a degree, that within a few years the mouths of the city sewers will be stopped up, and the health of the inhabitants disturbed, if not seriously endangered, with fatal epidemical consequences. I believe the germ is already sown, and, without great vigilance, may produce painful results should the weather next summer, say December, January, and February, be warm and sultry. Since I came here, in 1860, the Imperial Government has sent at least three or four corps of engineers here to examine, at different times, this port, with the view of founding and building a quay; but nothing has been done further than that the provincial custom-house has been removed to a more healthy locality, or perhaps I should say a less unhealthy locality. Years ago, as above, there was not a jetty from which I could not jump into water fourteen feet deep at low tide. These jetties have from time to time been elongated, but at low tide show only mud or a few feet of water, so that steamers and other vessels loading and discharging have hulks into which or over which to discharge and load. Why is this? The Sao Paulo Railroad Company, the stem of our railroad system, has always had and has a guaranteed interest upon its capital of 7 per cent. per annum. This railroad pays much more than 7 per cent., and the surplus is divided with the Imperial Government, which it seems is not deemed advisable to deduct from revenue to be applied to the improvement of this port, upon which the intercourse of this province with outside and foreign ports depends; and why such a port is allowed to be ruined is a question that cannot be prudently answered.

WILLIAM T. WRIGHT,
Consul.

UNITED STATES CONSULATE,
Santos, July 23, 1883.

W.—*Showing the quantity of coffee in bags of* 60 *kilograms each, and the value in United States money, cleared from Santos during the fiscal year* 1882–'83, *as per Table A* (*b*) *annexed.*

[Value given is the invoice value, averaged according to invoices certified to at this consulate at 43 cents per milreis, or London exchange 21½d., United States Government 54.6 cents.]

Destination.	Bags.	Value in U. S. gold.
United States	322, 328	$3, 519, 821 76
Europe	1, 503, 675	16, 420, 731 00
Coastwise	11, 843	129, 325 56
Total	1, 837, 846	20, 069, 278 32

A.

(*a.*) *Exports of coffee during the past ten years ending 30th of June.*

[In tons of 2,240 pounds English.]

Destination.	1882–'83.	1881–'82.	1880–'81.	1879–'80.	1878–'79.
Channel and England	15, 753	14, 167	4, 132	6, 494	[illegible]
France, Belgium, and Holland	39, 883	32, 929	25, 908	22, 026	26, 944
Lisbon and Mediterranean	10, 108	7, 322	4, 969	2, 628	[illegible]
Hamburg and Bremen	21, 994	20, 335	20, 585	17, 051	[illegible]
United States	18, 807	13, 613	13, 720	11, 284	[illegible]
Rio and coastwise	691	586	949	1, 334	[illegible]
Total	107, 236	88, 952	70, 263	60, 817	70, 612

Destination.	1877–'78.	1876–'77.	1875–'76.	1874–'75.	1873–'74.
Channel and England	7, 253	4, 985	12, 370	18, 016	[illegible]
France, Belgium, and Holland	16, 725	7, 487	5, 717	7, 679	5, 314
Lisbon and Mediterranean	6, 135	5, 299	4, 899	4, 898	[illegible]
Hamburg and Bremen	18, 865	12, 536	11, 691	11, 987	11, 719
United States	5, 695	4, 706	7, 183	4, 643	[illegible]
Rio and coastwise	3, 618	1, 683	2, 193	995	[illegible]
Total	58, 291	36, 696	44, 053	48, 218	[illegible]

(*b.*) *Exports of coffee during the past ten years, from 1st of July to 30th of June.*

[In bags of 60 kilograms.]

Destination.	1882-'83.	1881-'82.	1880-'81.	1879-'80.	1878-'79.
Channel and England	269, 980	244, 801	70, 821	111, 236	55, 217
France, Belgium, and Holland	683, 532	564, 346	444, 026	377, 489	461, 784
Lisbon and Mediterranean	173, 228	125, 481	85, 154	45, 034	89, 548
Hamburg and Bremen	376, 935	348, 500	352, 789	292, 218	398, 837
United States	322, 328	233, 308	235, 137	193, 384	179, 263
Rio and coastwise	11, 483	10, 050	16, 271	22, 885	25, 523
Total	1, 837, 846	1, 524, 486	1, 204, 198	1, 042, 246	1, 210, 172

Destination.	1877-'78.	1876-'77.	1875-'76.	1874-'75.	1873-'74.
Channel and England	124, 296	85, 420	211, 997	308, 764	162, 439
France, Belgium, and Holland	286, 647	128, 313	97, 986	131, 612	91, 029
Lisbon and Mediterranean	105, 137	90, 820	83, 961	83, 939	40, 896
Hamburg and Bremen	323, 319	214, 849	200, 359	205, 441	200, 840
United States	97, 602	80, 054	123, 104	79, 569	119, 284
Rio and coastwise	62, 006	28, 847	37, 586	17, 057	52, 456
Total	999, 007	628, 903	754, 993	826, 382	666, 934

B.—*Vessels and tonnage cleared during year* 1882-'83.

FOR FOREIGN PORTS.

Nationality.	Steamers.	Tonnage.	Crew.	Sailing vessels.	Tonnage.	Crew.	Total.				
							Steam and sailing vessels.	Tonnage.	Crew.	With cargo.	In ballast.
Brazilian											
English	77	109, 788	3, 442	29	9, 491	235	106	119, 279	3, 677	80	26
German	77	112, 580	3, 304	13	3, 370	88	90	115, 950	3, 392	90	
French	27	35, 264	1, 040	5	2, 263	55	32	37, 527	1, 095	27	5
Belgian	6	7, 591	197				6	7, 591	197	6	
Italian	5	6, 030	236	4	1, 921	46	9	7, 951	282	7	2
Danish	1	1, 075	18	3	759	21	4	1, 834	39	3	1
Norwegian				29	10, 088	216	29	10, 088	216	27	2
American				5	1, 836	37	5	1, 836	37	1	4
Swedish				3	1, 091	28	3	1, 091	28	2	1
Portuguese				2	695	18	2	695	18	1	1
Dutch				1	196	6	1	196	6	1	
Greek				1	504	11	1	504	11		1
Russian											
Total	193	272, 328	8 237	95	32, 214	761	288	304, 542	8, 998	245	43

B.—*Vessels and tonnage cleared during year* 1882–'83—Continued.

FOR DOMESTIC PORTS.

Nationality.	Steamers.	Tonnage.	Crew.	Sailing vessels.	Tonnage.	Crew.	Total.				
							Steam and sailing vessels.	Tonnage.	Crew.	With cargo.	In ballast.
Brazilian	175	92,799	6,189	125	7,494	525	300	100,293	6,714	175	125
English	21	13,575	605	26	8,448	233	47	22,023	838	7	40
German	.....	.....	.....	6	2,974	65	6	2,974	65	.....	6
French	1	1,957	60	1	137	6	2	2,094	66	1	1
Belgian	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Italian	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Danish	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norwegian	.....	.....	.....	29	12,534	262	29	12,534	262	1	28
American	.....	.....	.....	1	386	7	1	386	7	.....	1
Swedish	.....	.....	.....	1	187	5	1	187	5	.....	1
Portuguese	.....	.....	.....	8	2,198	57	8	2,198	57	3	5
Dutch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greek	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russian	.....	.....	.....	.....	280	7	1	280	7	.....	.....
Total	197	108,331	6,854	198	34,638	1,167	395	142,969	8,021	187	.....

TO—

Hamburg	51	**Valparaiso**	1
Havre	50	**Pondicherry**	1
New York	42	**Newcastle**	1
Falmouth	20	**Maulmain**	1
Lisbon	16	**Bull Rivers**	1
Antwerp	14	**Duboz**	1
Bremen	14	**Fiume**	1
Channel	14	**Ceylon**	1
Buenos Ayres	7	**Rio de Janeiro**	139
Southampton	5	**Portos do Sul**	68
London	5	**Pernambuco**	44
Genoa	5	**San Francisco**	33
Barbadoes	4	**Paranagua**	22
Liverpool	4	**Tijuaca**	17
St. Thomas	4	**Ytajahy**	20
Trieste	3	**Guaratuba**	14
Valparaiso	3	**San Joao de Barra**	12
Montevideo	3	**Rio Grande do Sul**	6
Marseilles	2	**Bahia**	4
Hayti	2	**Maceio**	3
Aruba	2	**Cambriú**	3
Rangoon	2	**Santa Catharina**	3
Baltimore	2	**Aracajú**	2
Marvin	1	**Porto Alegre**	1
Philadelphia	1	**Rio Grande do Norte**	1
Saint Mau	1	**Cabo Frio**	1
Pensacola	1	**Antonina**	1
Portland	1	**San Sebastian**	1
Sombrero	1		
Total			683

FROM—

Rio da Prata	39	**Havre**	24
Liverpool	34	**New York**	16
Hamburg	33	**Newcastle**	15
Cardiff	25	**New Port**	15
Southampton	25	**Buenos Ayres**	12

Hyères	11
Bremen	10
Calhâu	7
London	7
Montevideo	7
Porto	6
Cette	5
Swansea	4
Marseilles	4
Genoa	4
Middlebrough	3
Brunswick	3
Philadelphia	3
Trapani	3
Baltimore	3
Rosario	5
Richmond	3
Memel	2
Stettin	2
Calachery	1
Tarragona	1
Helsingfors	1
Copenhagen	1
Ilha de Maio	1
Oester	1
Grinsby	1
Lisbon	1
Toulon	1
Torre Vieja	1
Plymouth	1
Sunderland	1
Rio de Janeiro	148
Portos do Sul	60
San Francisco	31
Paranagua	19
Tijuaca	16
Itajahy	14
Pernambuco	12
Guaratuba	12
San Joao	12
Rio Grande do Sul	5
Cambriú	4
Santa Catharina	2
Iguape	1
Barra velha	1
Cabo Frio	1
Maceio	1
Itaguahy	1
Bahia	1
Total	341

C.—*Imperial custom-house revenue during years* 1881-'82 *and* 1882-'83, *from all sources except emancipation fund.*

Month.	1882–1883.	1881–1882.
July	664:254$886	371:784$329
August	409:080$873	381:135$578
September	396:967$704	520:056$292
October	765:067$590	659:875$379
November	533:976$512	644:420$718
December	629:035$806	649:119$792
January	485:593$884	896:625$989
February	478:015$439	677:737$623
March	520:584$409	492:031$882
April	526:837$336	436:855$526
May	455:279$994	541:915$861
June	538:549$367	461:066$463
	6.403:243$800	6.232:625$432

D.—*Receipts from all sources at the imperial custom-house from January* 1 *to June* 30 1883.

	January.	February.	March.	April.	May.	June.	Total.
Imports	272:931$199	273:551$133	294:833$160	305:732$372	274:072$412	295:165$966	1,716:286$242
Clearances	1:959$600	2:215$700	2:022$400	1:277$300	2:131$500	2:200$050	11:806$750
Exports	193:948$933	178:459$514	200:203$417	187:147$017	159:129$200	224:664$687	1,143:552$768
Interior	14:784$770	16:447$382	17:739$291	26:261$414	14:333$559	14:037$130	103:603$546
Extraordinary	473$947	866$506	806$222	1:631$999	924$438	723$086	5:426$198
Deposits	1:495$235	2:235$254	3:923$919	4:579$234	4:688$885	1:742$448	18:664$975
Emancipation fund	4:240$000	1:056$000	208$000	....	16$000	....	5:520$000
	489:833$884	474:831$489	519:736$409	526:629$336	455:295$994	538:533$367	3,004:860$479

Receipts from all sources at the provincial custom-house from January 1 *to June* 30, 1883.

	January.	February.	March.	April.	May.	June.	Total.
Export duties	137:072$716	97:960$253	118:171$627	101:006$535	112:707$930	91:527$792	658:446$853
Wharfage	16:857$255	10:733$489	10:927$205	8:536$844	10:320$144	9:068$636	66:443$573
Different fees	3:481$000	1:981$027	1:625$908	3:946$207	2:074$801	3:627$702	16:736$645
	157:410$971	110:674$769	130:724$740	113:489$586	125:102$875	104:224$130	741:627$071

T.—*Statement showing the amount of duties collected at Santos during the two last fiscal years ending June 30.*

Years.	Imperial imports.	Imperial exports.	Provincial exports.
1881-'82	2, 909, 023$814	2, 859, 031$101	1, 274, 805$457
1882-'83	3, 421, 250$434	2, 607, 029$661	1, 318, 294$716

N.—*Statement showing the official quantities and values of the total exports from Santos during the year ended June 30, 1883.*

Description.	Weight.	Brazilian currency.	United States money.
	Pounds.		
Coffee in bags	242, 595, 672	33, 458, 227$029	$14, 387, 037 62
Hides, horns, fruits, &c	2, 810, 701	585, 173$965	251, 624 80
Total		34, 043, 400$994	14, 638, 662 42

V.—*Statement showing the official quantities, values, and destination of sundry articles exported from Santos during the year ended June 30, 1883.*

Articles.	Weight.	Value in United States currency.	Destination.
	Pounds.		
Hides	521, 442	$21, 871 45	Europe.
Horns and hoofs	106, 047	1, 063 35	Do.
Sundry articles, as per Table G annexed	2, 183, 212	228, 690 00	Coastwise.
Total	2, 810, 701	251, 624 80	

G.—*Coastwise exportation from Santos of sundry articles in 1882-'83.*

Articles.	Weight.	Value in United States currency.
	Pounds.	
Tobacco	692, 435	$75, 641 04
Bales of raw cotton	858, 418	70, 403 31
Sole leather	209, 770	32, 800 40
Bacon sides	158, 015	15, 144 23
Cotton cloth	37, 233	10, 795 58
Rock in crystal	65, 813	12, 863 45
Tea	7, 687	3, 004 84
Dry hides	15, 620	1, 300 61
Glue	13, 420	1, 311 58
Black beans	53, 453	1, 301 14
Bones	22, 088	647 58
Live animals	4, 774	571 90
Brooms	3, 124	306 16
Lumber	1, 100	270 90
Herva Mate	6, 160	247 36
Wine	2, 926	238 65
Quinine and sassafras	369	209 67
Mares' grease	1, 320	206 40
Bananas	22, 655	201 75
Cheese	1, 100	193 50
Harness	880	193 50
Sugar	3, 278	172 00
Candy, say sweetmeats	1, 353	180 24
Rice, corn, farina, &c		410 39
Total	2, 183, 212	228, 690 00

P.—*Exports of products during the year* 1881–'82.

	Kilograms.
Coffee	115,124,716
Cotton	152,961
Tobacco	128,045
Sugar	27,633
Fat or hog sides	64,013
	Liters.
Rice	793,765
Beans	359,458
Maize	161,313
Mandioca meal	5,479
Total value	41,043,400$297

R.—*Statement showing the exports from Santos to the United States for the year* 1882–'83.

Articles.	Exports.	
	Amount.	Value.
Coffee in bags of 132 lbs each ... pounds	332,328	$3,519,821 76
Old iron rails ... pieces	3,099	7,286 02
Total	....	3,527,107 78

TRADE AND COMMERCE OF CANTON.

REPORT OF CONSUL SEYMOUR.

I have the honor, in compliance with requirements of the Department of State, to make the following report on commerce at Canton, at ports where United States consular agencies are established, in connection with or under jurisdiction of this consulate, and in Southern China, with a general summary of the prominent features of business in the East as affecting American interests.

CANTON A BUSINESS CENTER.

Canton maintains its long established position and character as the chief point of supply and distribution of and for a large and populous portion of Southern China, notwithstanding the transfer of merchandise to and from the sea-going vessels engaged in foreign trade generally occurs at the British free port of Hong-Kong.

These facts are partly made apparent by reference to statistics showing tonnage and value of merchandise, and the volume of business movements to and from Canton by fleets of steamers regularly plying between this and other ports.

TWO SYSTEMS OF TRANSPORTATION AND REVENUE CUSTOMS.

But those items do not embrace the large amount of merchandise conveyed between Canton and the sea-coast by native craft, known as the "Chinese junks," which are innumerable or unnumbered.

The extreme difficulty or impossibility of obtaining full and accurate trade returns in Southern China will be appreciated when it is understood that, in the absence of any custom-house at Hong-Kong, there is no data or record of the imports or exports at that principal sea-port for a coast of over a thousand miles in extent, and that the "imperial maritime customs" at Canton have nothing whatever to do with the collection of duties on imports or exports that come or go by "native craft," or the numberless Chinese junks whose business is reported and transacted at and along the line of "native custom-houses," where tonnage dues and duties are adjusted by and with native officials or contractors, who, by paying a certain sum per annum for the revenues of a prescribed district of limited dimensions, conduct that business upon confidential terms. There is positively no record of those transactions preserved from one day to another.

The actual results of each day are pocketed without any details for inspection. The imperial maritime customs department is conducted throughout the Empire of China by salaried foreigners, at the head of whom is Sir Robert Hart, of England, with a salary of $50,000 per annum. The commissioners, assistant commissioners, and entire staff of officials under him are foreigners, among whom are several very competent, efficient, and highly esteemed Americans, the commissioner for the port of Canton being a New Yorker and graduate of Yale College, while one of the two assistant commissioners in the imperial maritime customs at Canton is a native of Massachusetts and graduate of Williams College, his associate commissioner being a Parisian, as was his predecessor, recently transferred to Shanghai. The collection of the uniform duty of 5 per cent. *ad valorem* (or its equivalent) on imports and exports being thus intrusted to a judiciously selected and thoroughly trained corps of well-paid foreigners, whose transactions are conducted and recorded in a business-like manner, the Chinese Government derives the legitimate revenue from the business intrusted to the imperial maritime customs department in which, like all other branches of public service in China, strict rules are observed in regard to continuance and promotion of officials, with retirement and pension after a certain period. Where the conditions of transportation favor the employment of large fleets of native boats, as is the case between Canton and Hong-Kong, the Chinese Government has found it more satisfactory in point of revenue to "farm out" the collection of duties on merchandise conveyed by junks and other native craft to contractors, who thus become unsalaried detectives to prevent smuggling. Those who are inclined to laugh at this double-barreled arrangement for collection of revenue should take a second look at the Chinese plan, which, while indicating unlimited confidence in foreign officials, makes the native branch of the revenue system not only self-supporting and remunerative, but actually free from expense for a force of detectives who make smuggling a hazardous business.

It is so unlike the revenue system of other countries that these facts should be taken into consideration when discrepancies in statements appear from comparison of what are sometimes approximate estimates instead of reliable records and authentic returns. Those who have attempted to investigate closely into personal or official affairs of the Chinese, and especially into the privacies of their business operations, have found that their ability to maintain secrecy is unlimited.

COMMERCIAL FEATURES AND ITEMS.

In the following commercial items of Canton the imports and exports of "treasure" are not included; and no mention is made of the imports and exports by Chinese junks or other native vessels or craft, respecting which no approximate or accurate estimate can be made as to their number or aggregate of tonnage employed, although of sufficient magnitude to give employment to many thousands of navigators and of enough value and importance to justify each vessel in carrying from six to twenty loaded cannon to guard cargoes from river pirates.

Precaution of a similar nature is observed on all of the river steamers between Canton and the two ports of Hong-Kong and Macao, the officers being thoroughly armed with revolvers and the first-class passenger saloons being well equipped with fire-arms, cutlasses, and other efficient weapons, to guard against any attempt to capture vessel or cargo. Armed guards or constantly on duty. As all imports and exports per steamers between Canton and Hong-Kong are entered at the custom-house in Canton as coming from or going to Great Britain, or a British port, for the uniform import or export duty of 5 per cent. or its approximate equivalent, the classification of imports and exports, according to the various nationalities concerned, is beyond human reach.

All merchandise, including cotton and woolen goods, imported, appear in the custom-house tables by specified numbers of pieces and weights, with aggregate of values, without reference to yards or measurements.

Comparing returns of imports and exports for several successive years, there seems to be an absence of marked fluctuations, or increase and decrease, in the various items of commerce, although available statistics indicate a steady growth of Chinese manufactures.

It seems to be the aim or purpose, if not the policy of the Chinese, to give employment to their people, and to develop a national condition of self-reliance and thorough independence as to a supply of articles of necessity and comfort, as will appear by an inspection of the range and diversity of skilled labor in Canton and other Chinese cities, and by an examination of the leading items of import and export.

No man with a business eye in his head can go through the streets of Canton without being profoundly impressed by the variety and multiplicity of its industries. Inspections of Chinese merchants' stocks of merchandise reveal the fact that British, American, and other foreign manufactures are kept indiscriminately for sale, and while the larger portion of such foreign supplies come from England, neither seller or buyer seems to know or care where they come from or whither they go.

Little distinction is made by Chinese between Americans, Britons, Germans, Frenchmen, Russians, Scandinavians, Italians, Spaniards, or the various nationalities of the western hemisphere, except the Portuguese, who are special objects of Chinese hatred, on account of the loss of Macao; and there is less discrimination observed in regard to their respective productions. Foreigners are "barbarians" whose wares are slowly bought, but quickly copied. If Great Britain sells China, and other nations in the East, more merchandise than is here sold by any other country of the western hemisphere, it is because she is more largely represented by merchants and salesmen than any other country; and by nearly as many as are found from all other countries combined. Out of 4,792 European merchants and mercantile establishments and residents in the treaty ports of China and Hong-Kong, about 2,300 are British; and as the last-mentioned port is thoroughly identified with the commerce of Great Britain, this city of Canton, about 80 miles distant, is, more than any of the other Chinese cities, affected by, or under the influence of, the British commercial system. Of the entire foreign commerce at the treaty ports in China, estimated at $235,000,000 per annum, $170,000,000 are claimed as British. In the absence of authentic statistics those figures seem exaggerated, but are permitted to go unchallenged, as are many other commercial statistics, which become valueless by exaggeration. Gibraltar's claim to the commerce of the Mediterranean, or Egypt's claim to the commerce of the Suez Canal, would not be more absurd than the pretensions of some cities to commercial supremacy based on statistics.

TONNAGE.

The aggregate of tonnage, in 1882, of steamers to and from Canton, reported at the imperial maritime customs, was 1,850,000 tons, with an average of eight arrivals and departures for each business day of the year. Only thirty-six foreign sailing vessels, with an aggregate of 13,000 tons, visited Canton during the year 1882. The capacity of the Chinese junks, running between Canton and the sea, ranges from 70 to 150 tons each; and of those sailing between Canton and upper ports of the river, from 35 to 75 tons each. The arrivals and departures of these native vessels are variously estimated at from 500 to 700 per day. Taking the lowest number as the basis of calculation, and 50 tons as a moderate average of capacity, the result is 25,000 tons per day, or 9,000,000 tons for the business days of the year.

Perhaps it might not be far astray to assume that one-third of this total of native tonnage at Canton belongs to the Canton and coast trade; and the other two-thirds to the Canton and interior or native commerce.

If so, the tonnage estimates will run about thus:

	Tons.
Per river steamers	1,850,000
Per foreign sailing vessels	13,000
Per native vessels, Canton and coast	3,000,000
Showing a grand total	4,863,000

between Canton and foreign countries. No estimate of this nature has been published; but it may be, in the absence of authentic returns, deemed an approximate exhibit of the tonnage between Canton and the sea-board, and chiefly of the nature of foreign commerce. In getting at the magnitude of the native tonnage, I have had the assistance of custom-house officials, whose observations are entitled to confidence.

PASSENGER TRAFFIC.

In 1882 the passenger traffic between Canton and coast ports, including Hong-Kong and Macao, by steamers that reported at the imperial maritime customs in Canton, amounted to about 700,000 passengers, only 5,000 of whom were foreigners.

This shows an average of over 2,200 passengers per day, for the business days of the year.

During the first half of 1883 these steamboat passengers numbered 378,000, showing increase. The passenger traffic between Canton and the interior cannot be accurately computed or stated; but, at a moderate estimate, the arrivals and departures of passengers at Canton, by native boats plying between Canton and interior ports, are 25,000 per day, or 9,000,000 per year, if we allow only fifty passengers on each of the 500 vessels arriving at and leaving port daily. Many of these native boats are crowded with passengers. This would indicate an active passenger movement.

IMPORTS AND EXPORTS.

The total value of imports at the imperial maritime customs in Canton in 1882 was about $19,500,000, about one-third of which was entered as from foreign countries and about two thirds from native ports. The exports from Canton in 1882 were valued at about $24,500,000, of which about three-fourths went to foreign countries and about one-fourth to native ports. The total value of imports and exports in 1882 was about $44,000,000 at Canton, exclusive of shipments and receipts by the native vessels, whose business is not permitted to obtain record or publicity, as they report only to the native custom-houses. Here I omit reference to importations of opium at Canton, for it is so extensively smuggled as to leave one without any accurate statistics as to quantities or valuations, although the amount consumed is almost fabulously large, offseting nearly, as for China, her entire exports of tea and raw silk.

COTTON IMPORTS.

British trade journals, in reviewing the results of forcing Chinese and other Asiatic markets with Manchester goods during the year 1882, have spoken deploringly and discouragingly of the pernicious system of anticipating the actual needs and legitimate demands of these countries, whose markets broke down under the pressure of an excessive supply, and thus entailed losses on shipments that were not required, or called for, by these over-supplied markets. This is only another version or manifestation of the old European manufacturer's policy of making or submitting to sacrifices abroad on surplus stocks rather than to disturb valuations of merchandise in their "home markets." This being so, it may be some consolation to know that, if Americans did not have the lion's share of sales of cotton manufactures in China—this trade is subject to such incumbrences as to make the prize of questionable value—the chief consideration or advantage being an acknowledged superiority which should be scrupulously maintained until it obtains unchallenged recognition or until all people discriminate between pipe-clay and cotton.

Both American and European manufacturers should bear in mind two very significant facts, viz, that the largest item in foreign imports at Canton is cotton yarn, which constitutes three-fifths of the total imports of cotton goods, amounting to $2,700,000; and also that the second largest item of foreign imports is raw cotton, chiefly from Bombay, which supplies Canton with nearly all of the imported yarn. Of foreign raw cotton, Canton last year imported to the value of $1,400,000, besides receiving among its "native imports" 1,100,000 pounds, or 550 tons, of native raw cotton. These are significant items, for, rightly interpreted, they mean that Chinese cotton manufacturers are likely to check importations of foreign cotton goods. Whenever the Chinese overcome their aversion to modern machinery, their cheap labor may cause a transformation that will bring the most agrarian free-trader to his senses.

WOOLEN IMPORTS.

Of woolen imports, Canton last year received goods to the value of $465,000; the larger items being "Medium Cloth," "Spanish Stripes," "Union Cloth," and "English Camlets."

OTHER IMPORTS.

Jade stones form the third largest item of foreign imports, to the value of $345,000.

Cuttle-fish, of the value of $288,000, stands fourth on the import list.

Metals valued at $260.000 form the fifth item in importance among imports from foreign countries. Ginseng, mostly from America, but partly from Japan, stands sixth among foreign imports. Less than $8,000 worth of machinery, and scarcely $3,000 in cutlery and hardware, were among the foreign imports of Canton in 1882. American clocks are among the most triumphant of imported articles, and seem to have no formidable rivals in Canton. Their honest faces, abundantly displayed in the windows and on the shelves of numerous shops in Canton, seem to welcome every American as an old friend; and it is a pleasure to hear united testimony as to their superiority and reliability.

Alongside of American clocks in Canton shops are found kerosene-burning lamps of American styles and manufactures; but the Chinese being familiar with glass are meeting much of the demand with lamps of their own manufacture, which they now export.

KEROSENE OIL.

Kerosene oil, which was very rapidly coming into use in Canton and throughout China, was one of the most successful and beneficial of American exports to this country or vicinity, where its value as a light was becoming so well appreciated that a Chinese "oil syndicate" was formed last year, and obtained control of all importations of that article into Canton; and by paying a fixed sum into the provincial treasury, stated at $31,000 per annum, acquired, with their monopoly of the kerosene-oil trade, the right, or permission, or authority to levy, in addition to the ordinary duty, a special tax of forty cents per case containing two cans, each of which contains four imperial or five common gallons. The effect of this "monopoly tax" has been to almost destroy the trade in kerosene oil since the special tax went into operation, about October 1, 1882, during which year about 500,000 cases of kerosene oil were brought into Canton.

A remonstrance made through the British consulate at Canton, in behalf of an English firm interested in this oil trade, elicited the reply from the Chinese authority that "once foreign merchandise has entered China and become the property of Chinese merchants, the manner and amount of the tax thereon cannot be controlled by foreigners." The imposition of this "monopoly tax" on kerosene oil does not seem to be in harmony with any recognized system of any government for securing revenue. Those who went into the speculation have defeated their purpose by making a severe levy upon an article of great utility; and notwithstanding the pretext that such a tax was necessary to prevent the American kerosene oil from driving the Chinese native ground-nut oil out of existence, there can be no doubt that the introduction of kerosene oil into general use for lights would cheapen the native oil for the benefit of the Chinese masses, who use it largely as an article of food, and in the preparation of various kinds of food in lieu of butter, which is too expensive for the common people in Asia. This subject is worthy of attention.

In the mean time a serious injury is inflicted on an important item of American commerce.

FOOD.

Considerable quantities of food are imported into Canton and all cities of Asia for the use of Europeans and Americans.

Of these, flour takes the precedence and can best be obtained from California. "Akron oatmeal" should also be here to compete with oatmeal from Scotland, Australia, and New Zealand. There are many other articles that might be brought from the United States instead of from Europe, if Americans can be induced to comply with the requirements of tropical countries and climate as to packing. Salmon is brought from the Pacific coast in good order, and gives satisfaction.

Butter from America is usually spoiled because it comes in too large packages, while butter from France, Denmark, and Italy, and even from New Zealand and Australia, reaches China in excellent condition, and is retailed at all stores of supply at about 60 cents per pound, in one and two pound cans. It would be better if packed in air-tight jars. Cheese from America, upon arrival, is far richer and more palatable and nutritious than cheese from any other country; but so much is lost by exposure to this climate that merchants are compelled to throw away enough to make it necessary to sell only at about 45 cents per pound. Small cheeses, about ten inches in diameter, and as thick as ordinary cheeses that are of twice that diameter, well cured and separately encased in air-tight tins or tight wooden boxes, would command preference, as less liability to loss by damage would occur in shop or house. Hams and shoulders, if carefully cured and secured against the air by being placed not only in coated canvas but each in an air-tight box by itself, would have preference over ordinary meats of that kind, retailed at 45 cents per pound during the four months from December 1 to March 31.

WINES AND LIQUORS.

It is high time that the United States should carry on business in its own name. California sends about 100,000 gallons of wine per month, via Isthmus route, to France, where it is shipped to various countries in which American wine, by its proper name, would find little or no sale. California brandy, at the age of five years, if properly managed, is infinitely superior to the ordinary brands of European brandy, which is found to be so generally adulterated, to meet the demand for a genuine article, that it is surprising American brandy has not become a favorite article where purity is desired. And, as to whiskies, the American favorite brands are so much superior to the Scotch and Irish whiskies, that there is no reason why Americans should not export it to European and American consumers in Asia.

EXPORTS.

Canton exported last year silk and silk goods valued at over $12,500,000. Its silk trade is to-day on a better basis than heretofore; as the success of the "Silk-Condition House" at Canton has become so well recognized in European, American, and East India markets as a correctly managed establishment, that unlimited confidence is reposed in the certificates of condition and weight of raw silks for export trade. It was established in 1881 against the remonstrance and combined opposition of Chinese dealers, who have since become convinced of its usefulness, in maintaining a correct standard of weight and condition, which will give character to Canton silk abroad. Nearly one-half of the total silk exports was raw silk, and about one third of the total was of silk piece-goods. About one-fifth of Canton's raw silk exports went to the United States. India, France, England and Germany took the greater portion, or nearly four-fifths of all.

Tea stands second on the export list of Canton, with a valuation of $2,500,000. Sugar stands third as to valuation, with exports to the amount of about $1,250,000. Matting exports from Canton in 1882, at the value on which export duty was paid, were valued at $638,500 (=425,623 taels); but the United States consular invoices for matting exports to the United States show a valuation of about $900,000, and should thus stand fourth on the list of Canton exports.

Fire-crackers were exported to the value of $537,000, two-fifths of which went to the United States. Cassia exports reached $144,000. Clothing of cotton and silk, mostly for native use, were sent from Canton to the value of $333,000.

Bangles, or glass armlets of Canton manufacture, were exported to the value of $325,000; brass buttons also to the value of $260,000. Both bangles and buttons go principally to India. Medicines were exported to value of $220,000.

Canton preserves and sweetmeats, mostly for European and American consumption, were exported to the value of $230,000.

Human hair to the extent of 98,200 pounds (over 49 tons) was among Canton's exports. Paper, grass, cloth, jade stone ware, black-wood-ware, lamps, lead, copper, glassware, and silverware were among the considerable items of Canton's exports.

ECONOMY AND INDUSTRY.

Economy and industry are so universal among the Chinese people that all other nations will continue to find it a hard task to derive wealth from sales of their manufactures in the markets of China and especially in Canton, where economy and industry, combined with skilled labor and abundance of capital for all legitimate business purposes, are more impenetrable than walls against any and all attempts to capture Chinese markets for American or European manufactures. The natives are impregnable. *They need little, waste nothing, and do everything, and are as temperate as frugal.*

CHARLES SEYMOUR,
Consul.

UNITED STATES CONSULATE,
Canton, July, 31, 1883.

LABOR IN COLOMBIA.

REPORT BY CONSUL DAWSON, OF BARRANQUILLA.

As all enterprises for the development of the internal resources of a country in this age of vast capital depend principally upon the question of labor, and as this country affords a splendid field of operations for the genius, industry, and enterprise of Americans, and for the employment of their capital, I scarcely know of any greater service which I can render them than fully to inform them of the condition of the labor market here.

Almost daily we hear of persons leaving the United States for Colombia without any real knowledge of the country, and many investments are prevented for lack of reliable information about the cost of labor here. It will be well, therefore, to include all the data possible bearing upon the subject.

In order to proceed systematically, I will consider the subject under the following divisions and subdivisions and treat of them in detail:

ORIGIN.

(*a.*) NATURAL.—The natives of the country, like all American tribes, were Indians, of great diversity in their natures, from the peaceful, temperate, working tribes of the plains to the warlike, roving, indolent natives of the coast and southern latitudes; even now controlling certain sections of the country (for example, Barranca, Bermeja, or Puerto Santander) to such an extent that no strangers are permitted to settle in their territory, compelling the Government to abandon old mail-routes in order to preserve the lives of their officials. Certain chiefs make visits of allegiance to the Government, and occasionally individual members of the tribes reach civilization and remain and make good servants. There are no statistics to show whether the Indians are decreasing in numbers or not. The general opinion is that the emigration from the ranks of their able-bodied men is continual, consequently reducing the number of pure Indians.

(*b.*) CHANGES.—The conquest of the country by the Spaniards caused a complete change; mixing with the hardy stock of the Indians, the blood of the Spaniards was strengthened, and a class of people reared who became strong enough in time to break the yoke of serfdom, and become free men. The conquered people were compelled to work by their conquerors, and they gathered from the soil immense riches in gold, silver, and precious stones. Fortifications and domestic constructions were erected that in their perfectness of detail and finish are a wonder to the engineer of to-day. Immediately freedom was proclaimed every work came to a standstill, and the reaction was a detriment, the country remaining inactive until, by the infusion of the foreign element, the mercantile capabilities of the country have been developed, giving an impetns to trade that has ever been on the advance, except when blocked by civil war. The German and English Jews, and people of almost every nationality, have caused this activity and advancement.

(*c.*) Thus the present relation of the people of the country is one of great mixture. The foremost men in the mercantile, political, and literary circles are from the old Castilian families, but so changed by intermarriage that all bloods run in their veins. In the legislature, on the forum or the bench, and behind the banker's desk you will see the characteristics of all the races, from the Anglo-Saxon to the African. This at first seems to indicate conditions ruinous to the welfare of the country, whereas in reality it is the reverse, as it gives a versatility to the mind of the people, enabling them to judge what is available, and absorb this freely into their systems, and thus effect changes without any serious inconvenience to their inwrought pride. This brings us to the second division, which is tabulated as follows, and consists of the different classes and subclasses therein mentioned.

Wages and cost of living in Colombia.

Classes and positions.	Daily rate.			Monthly rate.			Yearly rate.	Perquisites.	Annual cost of living.		Number of men to crew or gang?	Will they go from place to place?	Do they learn easily.	Is it easy to secure men?	Comparitive value of the laborers, placing the American as the unit or 1.	Remarks.
	Highest.	Lowest.	Board allowed.	Highest.	Lowest.	Board allowed.			Hot and coast section of the country.	Temperate or elevated section of the country.						
RULING CLASSES.																
Political.																
President of nation							$12,000	Palace and franking.								
Secretaries							3,000	Franking		$2,000						
Senators	$6 00							Mileage		1,200						
Congressmen	6 00							do		1,000						
President of states							2,400									
Secretaries							1,320		$500	800						
State senators	3 00								500	800						
Representatives	3 00								500	800						
Civil.																
Governors							1,800		500							
Alcalde							1,800		500							
Secretaries							840		500							
Chief of police				$150 00	$60	No			240	300						
Policemen				30 00	12	No			120	180	10–30	Yes	Yes	Yes	.5	
Military.																
General				250 00		No			1,000	1,500						In times of war all officers receive three times the amount of pay which they receive in time of peace.
Colonel				175 00		No			500	800						
Lieutenant-colonel				125 00		No			500	800						
Major				100 00		No			500	800						
Captain				81 25		No			300	400						
Lieutenant				62 50		No			300	400						
Ensign				50 00		No			300	400						
Private	50														.5	

Director of school							4,000	House rent									
Teacher				150 00	60	No			500	700							
Naval.																	
Admiral																	Appointment honorary, as there is no navy. But they have captains and sailors who can be called on in times of war.
Captains				150 00	40	Yes											
Sailors				40 00	10	Yes											
Cadets								Education and one uniform annually.									
PROFESSIONAL.																	
Legal.																	
Judges							2, 400										
Notaries								5 per cent.									
Counselors																	See notes.
Medical.																	
Doctors and surgeons	50 00	$2 00														.8	A visit, according to the character of the disease.
Dentists	10 00	1 00														.8	An hour.
Miscellaneous.																	
Artists																	Portraits in demand. A good artist can secure paying orders.
Professors and teachers				150 00	40	No			600	800							The highest prices were paid to foreigners.
Engineers, civil and mining.				1, 000 00	60	No	Natives average $100. Foreigners average $250.		600	800							
Chemists				400 00	60	No	Mostly foreigners.		600	800							
Professor of agriculture				250 00	30	Yes											
Literary.																	
Authors Publishers Editors																	See article.
Printers				20 00	8	No			120	200	2–10	Yes	Yes	(*)		.6	
Apprentices				3 00	1	Yes						Yes	Yes	(*)		.3	
Clerical.																	
Priests							Fees					Yes	Yes	Yes			Generally missionaries.
Ministers														No			
Sisters of charity						Yes	Gifts										
MERCANTILE.																	
Commercial.																	
Bankers							$6,000										

* In small number.

Wages and cost of living in Colombia—Continued.

Classes and positions.	Daily rate.			Monthly rate.			Yearly rate.	Perquisites.	Annual cost of living.		Number of men to crew or gang.	Will they go from place to place?	Do they learn easily?	Is it easy to secure men?	Comparative value of the laborers, placing the American as the unit or 1.	Remarks.
	Highest.	Lowest.	Board allowed.	Highest.	Lowest.	Board allowed.			Hot and coast section of the country.	Temperate or elevated section of the country.						
MERCANTILE—Continued.																
Commercial.																
Merchants																See report.
Drummers							$5 to 10,000		†$3,000							Foreigners.
Agents				$500 00	$150	No			3,000			Yes	Yes	Yes		
General dealers																Profits large but sales are small.
Clerks and bookkeepers				150 00	30	No			600	$800		Yes	Yes	Yes	1	
Correspondents				150 00	100	No			600	800		Yes	Yes	Yes	1	Often foreigners.
Salesmen				40 00	8	No			120	200		Yes	Yes	Yes	1	
Porter and packer				20 00	5	No			50	80		Yes	Yes	Yes	1	
Errand boy				10 00	5	No			50	60		Yes	Yes	Yes	1	
Storage							½ per cent. commission.									
Washerwomen	$1 00		No.				By the piece; 10 to 20 cts. a day.					No	Yes	Yes		
Dressmakers	3 00	$1 00	Yes.													
Customs.																
Collectors						No	3,000									
Assistants				150 00	50	No			400		3	Yes	Yes	Yes		
Storekeepers				60 00	20	No			400		1	Yes	Yes	Yes		
Weighmasters				90 00	20	No			400		2	Yes	Yes	Yes		
Captains of port				100 00	50	No			400		2	Yes	Yes	Yes		
Interpreters				60 00		No			400		1	Yes	Yes	Yes		
Guardsmen				25 00	10	No			200		5-15	Yes	Yes	Yes		
Inspectors				150 00		No		Traveling expenses								

CARRIERS.																
Railroads.																
Superintendent						No	3,000									Laborers can be obtained, but time is required where the work is extensive. Some railroad enterprises are aided by troops and criminals. Many laborers are seeking work on the Isthmus Canal.
Telegraph operatives				100 00	30	No			400	500	1–5	Yes	Yes	No	.6	
Station-master				60 00	20	No			400	500		Yes	Yes	Yes	1	
Engineers				150 00	80	No			400	500		Yes	Yes	No	.5	
Conductor				100 00		No			400	500		Yes	Yes	Yes	1	
Machinists				100 00	40	No			400	500		Yes	Yes	No	.5	
Trackmaster				150 00	40	No			400	500		Yes	Yes	No	.5	
Trackmen	1 00	60	No						20 cents daily		4–8	Yes	Yes	No	.3	
Master mechanic				250 00	150	No			400	500		Yes		No	1	
Steamers.																
Captains				300 00	100	Yes					1	Yes		Yes	1	Wood costs the steamers from 80 cents to $1 for a ½ cord. The steamer will burn from sixty to one hundred of these ½ cords a day. Laborers must be taken the round trip, as no help can be secured at the stations.
Pilots				150 00	80	Yes					3	Yes	Yes	No	.8	
Pursers				60 00	40	Yes					1	Yes	Yes	Yes	1	
Engineers				150 00	90	Yes					2	Yes	Yes	No	.5	
Mates				50 00	20	Yes					2	Yes	Yes	Yes	1	
Firemen				40 00	20	Yes					6–12	Yes	Yes	Yes	.8	
Steward				40 00	20	Yes					1–3	Yes	Yes	Yes	.8	
Superintendent				500 00	200	No						Yes				
Line agents							5 per ct. commission.					No				
Sailors				20 00	10	Yes					10–12	Yes	Yes	No	.3	
Canoemen.																
Patrons of canoe	4 00	1 00	Yes									Yes	Yes	Yes	1	River transportation.
Canoemen	1 00	40	Yes								2–12	Yes	Yes	Yes	1	
Miscellaneous.																
Packmen	60	40	Yes								2–4	Yes	Yes	Yes	1	
Mule-drivers	60	40	No						20 cents a day		1–3	Yes	No	Yes	1	Mountain transportation.
Coachmen				20 00	10	No			20 cents a day			Yes	Yes	Yes	.5	Only found in a few cities.
PRODUCERS.																
Artisans.																
Shoe-makers	Piece-work								30 cents a day							The work is of good quality and well adapted to the country. Wages earned are very favorable.
Saddlers	Piece-work								30 cents a day							
Iron workers	5 00	1 00	No						40 cents a day			Yes	No	No	.5	Many foreigners.
Plumbers	5 00	1 00	No						40 cents a day			Yes	No	No	.3	
Carpenters	2 00	80	No						40 cents a day			Yes	Yes	Yes	.5	
Masons	2 00	80	No						40 cents a day			Yes	Yes	Yes	.3	A mason will lay 400 bricks.
Tailors	Piece-work		No		8				40 cents a day							Being the labor on one suit.
Hat-makers	Piece-work		No						40 cents a day							Hats generally, as Panama.
Cloth-makers	Piece-work		No						40 cents a day							Coffee-sacks and rough cloth for peons.
Brick and pottery	3 00	40	No						40 cents a day			Yes	Yes	Yes	.3	
Photographers																Foreigners. Cards, imperial size, $12 a dozen.

† Including traveling expenses.

Wages and cost of living in Colombia—Continued.

Classes and positions.	Daily rate.			Monthly rate.			Yearly rate.	Perquisites.	Annual cost of living.		Number of men to crew or gang.	Will they go from place to place?	Do they learn easily?	Is it easy to secure men?	Comparative value of the laborers, placing the American as the unit or 1.	Remarks.
	Highest.	Lowest.	Board allowed.	Highest.	Lowest.	Board allowed.			Hot and coast section of the country.	Temperate or elevated section of the country.						
PRODUCERS—Continued.																
Artisans.																
Cigar-makers							20 cents a hundred.		10 cents a day							Made by women and children.
Producers.																
Farm hands	$0 60	$0 40	Yes.	$25 00	$0 05	Yes						Yes	Yes	Yes	.5	Labor in these classes cannot be obtained in great numbers.
Woodmen	60	20	No.	15 00	5	Yes						Yes	Yes	Yes	.3	
Miners	5 00	40	No.	150 00	20	No			20 to 60 cents a day.			Yes	No	No	.3	
Fishermen	60	20	No.						10 cents a day			Yes	Yes	Yes	1	
SERVANTS.																
Family servants.																
Water-carriers				12 00	8	Yes						Yes	Yes	Yes	1	Help plenty.
Cooks				12 00	6	Yes						Yes	Yes	Yes	.5	
Nurses				10 00	4	Yes						Yes	Yes	Yes	.5	
Waiter and boy				20 00	8	Yes						Yes	Yes	Yes	.3	
NON-PRODUCERS.																
Gamblers Beggars																See report.
MISCELLANEOUS.																
Miscellaneous.																
Collector of plants Bird fanciers																See report.

Musical.															
Players **Singers**	......	......	......	......	......	......	......	......	......	......	......	......	......	......	**See report.**

NOTE 1.—Certain class of criminals are made to work in public works.

NOTE 2.—The post-routes of the interior are conducted on muleback.

DIPLOMATIC SERVICE.

Position.	United States and Europe.	Brazil, Chili, and Argentine Republic.	Ecuador, Venezuela, and Central America.	London, Lima, and Paris.	New York.	Liverpool.	Havre.	Southampton.	St. Nazaire.	Hamburg.
Ministers:										
First class	$12,000	$10,000	$8,000							
Second class	8,000	7,000	5,000							
Third class	6,000	5,000								
Secretaries:										
First class	5,000	4,000	3,200							
Second class	3,500	3,000	2,400							
Assistant secretaries:										
First class	1,800	1,800	1,800							
Second class	1,800	1,800	1,800							
Third class	1,800	1,800	1,800							
Consul-general				$3,600						
Secretaries				1,000						
Consuls					$7,000	$7,000	$4,000	$3,600	$3,000	$3,600
Consuls, special					1,200	1,200	1,200	1,200	1,200	1,200
Consuls not specified receive the fees for their salary.										

Perquisites: traveling expenses.

The ruling class here, as everywhere, are the politicians, but they are more under the control of the military class than is generally the case elsewhere. Out of thirty-three Presidents that have ruled the republic, seventeen have been generals in the army. Among the leading minds we find highly educated men who can converse and write fluently in various languages; who can demonstrate the most difficult problems in astronomical or mathematical formulas; who can dictate a learned philosophical discourse or dispute with any the influence of intricate history. Their constitution, laws, and government, are modeled after those of the United States; their financial and commercial policies after England; their fashions, manners, and customs after the French; their literature, verbosity, and suavity after the Spaniards. Patriotic eloquence is their ideal, and well is it realized in some of their orators.

Owing to the incessant fear of revolution, and knowing that their accession to power depends upon the military arm, great attention is paid to this branch of the service. The standard of the army is being raised. A large number of the sons of the best families from the respective states are being educated in the military school to become officers in the army. An officer of the American Army has been director of the school for a time past, and has prevailed upon them to adopt the American tactics.

PROFESSIONAL MEN.

A great many of these, especially the doctors, dentists, engineers, and artists have been educated abroad.

Every transaction here requires many formalities, even the account books of the merchants must receive the legal rubric; consequently the legal fraternity is constantly in demand. As nearly every trial is decided upon the written evidence, pleading at the bar is almost unknown.

In Colombia almost every one is a writer and a poet. The number of daily and weekly perodicals published, in addition to the many loose sheets issued, as the occasion may require, indicate this. Their own authors have furnished text-books on political economy, grammar, geography, arithmetic, and art, while philosophical, historical, and biographical essays and novels furnish all with interesting reading, the authors being protected by a copyright law. Some of the text-books are subsidized by government. The wages earned vary greatly. A few earn their living by this means, the publisher gaining the most. Editors, as a rule, have other business, and take this post in addition as a recreation. The clergy are of the Roman Catholic belief. The state and church are entirely separate. There are no nuns, but we often meet with Sisters of Charity, who act as educators to the poor and as nurses in the hospitals. Protestant ministers are gaining a foothold, but very slowly, in a country where everything is against them. Those Indian tribes unconquered, still retain their peculiar religious rites.

COMMERCIAL.

Lately banks and bankers have multiplied to a great extent. Paper money, heretofore almost unknown, is fast supplanting the coin of the country. This fact places a great power in the hands of the bankers. They are allowed to issue bills far above their specie reserve, charging from three-fourths to one and one-half per cent. a month for loans. The profits are very large, some banks paying dividends as high as 30 per cent per annum. The wholesale and commission merchants comprise a large class. They buy from the lowest-selling market, giving the largest credits, and sell to the small tradesmen of their individual section, often supplying these individuals with goods in advance on the coming crop. This gives them control of the produce a long time ahead. As the risk is great, their profits are correspondingly large; yet competition is reducing these, and, owing to rapid steam communication, many of the small dealers are importing direct, and thus dividing the business. Owing to the distance and difficulties of transportation, it often occurs that twelve months are required between the date of purchase and the time of returns.

Commercial travelers.—Foreign goods are mainly sold in this country by commercial travelers, who receive a salary, an allowance for expenses, and a commission on the sales effected. They will often sell $1,000,000 worth of goods on their trip through the country. The American market as yet has sent very few of these travelers.

Manufactures.—The manufactures of the country are comparatively few, and in the order specified: Rum, sugar, brick, pottery (including fine ware), cigars, furniture, hats, soap, oil, matches, cloth (coffee-sacks and rough cloth made from the pita fiber), tannery, iron works, gas, gold and silver works. The carrying trade is mostly done by canoes and pack-mules, there being few roads for wheeled vehicles; on the main rivers are steamers. There are about 100 miles of railroad in use, and many miles of telegraph. The people are general traders, and deal in anything from the smallest to the largest article.

The non-producers are the gamblers and beggars. The people are given to games of chance. Lotteries and raffles find many devotees. Beggars are very plentiful, owing to the peculiar diseases that scourge the country. Saturday is their day; then every merchant places on his table a quantity of small change, and delivers it as the mendicants call. There are a number of hospitals, cared for by the Sisters of Charity.

Musicians.—The Colombians are musicians, and spend a great amount of time and money in gaining this accomplishment. The German piano is found in almost every house, and many young people gain their living teaching this art, while extravagant figures are paid to foreign professors. There are few actors or actresses. The taste of the people is favorable to the growth of this art, and when a really good artist passes through the country he reaps a rich harvest.

Among the miscellaneous laborers we note the collector of orchids. He is generally sent out by a European house on a salary; his expenses are paid, and a commission on the net sales. When here he establishes himself at the most convenient place and sends out native runners, paying them from 1 to 30 cents a plant, according to the kind and condition of the parasites. They are worth from £5 to £100 in Europe. It is difficult to separate male from female in the classes specified, as in all the lower classes they work indiscriminately. Indeed the women do the heaviest part of the work, carrying burdens over the mountains equal to those of the men and one or two children besides.

Parties desiring laborers can get them, providing the work required comprises that which they have already learned. If it is anything novel, where use must be made of new tools or new systems introduced, then be careful; your supply will be limited, and they may abandon you at any moment, as there is plenty of fish in the river and plantains on the trees. You cannot drive the men, but by coaxing they will do almost anything. However they learn easily, and by care you can secure a large force. Labor, so praised as the fulcrum of success by the poets of our country, is only considered here as a base means of sustenance, and is far from their ideal; but time is changing them, and we may expect great improvement in the future.

THOMAS M. DAWSON,
Consul.

UNITED STATES CONSULATE,
Barranquilla, August 21, 1883.

RIGHTS OF FOREIGNERS IN MEXICO.

TWO REPORTS BY CONSUL-GENERAL SUTTON, OF MATAMOROS.

FIRST REPORT.

I have the honor to inclose herewith two articles from the Mexican Financier of the 11th instant on the rights of foreigners to acquire real estate in this country. The two articles are attached, making one inclosure. The first is the editorial comment, and the second by Mr. Frederick Hall, a lawyer of the city of Mexico.

This matter is of great present and prospective importance, and it would be a measure of great value to American citizens if the question could be definitely settled.

On this frontier especially, the 20 leagues' limit within which foreigners cannot hold real estate without previous executive permission has been and still is a serious obstacle. It is also alleged, and, I believe, with cause, that it has been more difficult for Americans to obtain permission than for Europeans. The house in which this is written was built many years ago by an American citizen, at a cost of over $80,000. The owner, Mr. F. Yturria, has no public title, and he has vainly tried at various times to obtain the privilege of publicly owning it. In this case it is held by what is here called a "counter document." To illustrate: the American furnished the money to his brother, who was a Mexican citizen. The latter bought the land, built the house, and gave possession. He also gave the "counter document," that is, a private declaration to the effect that the former had furnished all the money, and that the said house and land was by right the property of the former, and bound, or attempted to bind, his heirs to respect and confirm the same. The Mexican brother died, and the open title was passed to another brother, also Mexican, and he in turn gave a "counter document." A quarrel breaking out, the matter was at length adjusted by transferring the public title to a son of the American, who, I presume, has claimed his Mexican right of birth.

Other cases have come under my knowledge, where mortgages against property have been bought and held until they were worth more than the property. This works fairly so long as possession is obtained and kept, but if rented I doubt very much whether payment could be forced in the court or the tenant ejected.

Similar cases can be found the whole length of the frontier, in all of which the rights of property and inheritance are in an unsettled condition, causing much loss and risk to all interested. I have thought that a commission to determine upon such property rights would, in the near future, be very necessary.

Referring to Mr. Hall's article, it will be seen that he argues very *plainly* the ample rights of foreigners to acquire real estate, but that he refers to an opinion given by Mr. F. G. Palacio, governor of the State of Durango, which distinctly affirms (see inclosure) that foreigners cannot acquire real estate within 20 leagues of the frontier without executive permission, nor within 5 leagues of the maritime shore except by act of Congress, and that titles are forfeited by absence.

In his recapitulation (see inclosure) Mr. Hall says that foreigners may purchase, hold, transfer, &c., lands anywhere in Mexico equally as well as Mexicans, excepting lands of the public domain. They may have the right so to do, but it is not practicable. I am informed that it is required of all notaries before whom deeds for lands on this frontier are executed, to recite in the opening of the instrument the residence and nationality of the parties, and, if the purchaser be a foreigner, to insist upon the production of his permit before proceeding. Also, that the fact of such permit (referring thereto as being then produced) should be recited in the deed giving the date of its issuance. I have been informed that without such declaration the title may be legally declared void. At least it would leave the title in grave doubt, and that alone would prevent such transactions. It is also quite probable that notaries would refuse to execute deeds unless these provisions were obeyed.

WARNER P. SUTTON,
Consul-General.

MATAMOROS, *August* 29, 1883.

[From the Mexican Financier, city of Mexico, August 11, 1883.]

FIRST ARTICLE.

THE RIGHTS OF FOREIGNERS.

We increase the number of our pages to-day especially to make room for an important and exhaustive article on the rights of foreigners in Mexico, prepared by the Hon. Frederic Hall. Judge Hall, who is now engaged in the practice of law in this capital, has had an extensive legal experience in California. He has devoted much attention and critical study to the constitution and the laws of Mexico, and his familiarity with the decisions of the Supreme Court of the United States renders him eminently fit to analyze and master the various questions which may arise under the constitution and laws of this republic. Probably no man in either republic is more capable for such a task than he.

The question of the property rights of foreigners is one of paramount importance just now in this country. There is a great and increasing interest felt in the same both at home and abroad, and Mexicans themselves, no less than foreigners, should desire to see these questions definitely adjusted in a liberal spirit.

The opinion given by Governor Palacio, of Durango, at the request of the State of Sonora, has caused a widespread uneasiness among foreigners who have invested heavily in property in this country. If it were true, as claimed by Governor Palacio, that foreign owners of real estate in this country would forfeit their property through a two years' absence from Mexico unless with the consent of the Government, it would be atrocious, and not only in defiance of modern governmental, not to say republican, principles, but a violation of the most sacred rights of the individual in property.

This opinion, however, Judge Hall demonstrates, and we think very conclusively, to be thoroughly untenable. Not only this, but the restrictions as to the rights of foreigners to hold property within 20 leagues of the United States boundary and within 5 leagues of the sea-coast are shown to be unconstitutional and in conflict with the fundamental principles upon which this republic was based.

Judge Hall has made a careful study of the Mexican constitution, and he finds that it gives impliedly to foreigners the same rights in property in this country that are enjoyed by Mexicans themselves. He fortifies his opinions by ample citations from rulings made under the Constitution of the United States respecting rights in property, showing that it is a function of the State governments to make laws concerning rights in property, and with this function the Federal authority has no right to interfere. And as the Mexican constitution is even more liberal than that of the United States in these matters, it follows, as a matter of course, that legislation concerning the rights of property rests solely with the several Mexican States. Under this construction both the twenty-league and five-league limits are thrown down, together with the particularly unjust restrictions like the one imposing forfeiture of property in case of a two years' absence from the country.

It is of the greatest importance to Mexican property holders, as well as to foreigners, that this question should be decided by the courts in the liberal and equitable spirit which a true interpretation of the constitution would warrant. Many foreign capitalists who would like to invest their money in property in this country are deterred from so doing on account of the existence of these discriminations, and the opinion of Governor Palacio will only make them more timid, although the argument of Judge Hall shows its thorough instability. This state of affairs is a great drawback to the progress of the country. It keeps Mexican property-holders from realizing on their estates, and therefore depresses the price of real estate. If the hundreds of great haciendas in the market might be bought by foreign capital they would be developed and add greatly to the resources of the country. They would be colonized with industrious agricultural populations and vast tracts would be stocked with cattle. The wealth, taxable property, products for export, and population would all be immensely increased, while the traffic of the railways would be correspondingly enlarged.

Therefore, as we have said, it is of the greatest importance for the interests of the country that this great question should be settled in accordance with the liberal spirit which characterizes the Mexico of to-day, welcoming to her shores the world's industry and capital; not the spirit of the Mexico of the days before the Reformation, convulsed by internal feuds and shutting herself out from the world by a Chinese barrier of distrust and non-intercourse, which no one cared to pass over.

SECOND ARTICLE.

FOREIGNERS' RIGHTS IN MEXICO.

Messrs. Editors of the Mexican Financier:

Having been for some time in the practice of the law in this city, I have endeavored to observe with some degree of care the prominent questions of jurisprudence arising here, and which must necessarily present themselves for consideration with the material advancement of the country; and more especially those pertaining to the rights of foreigners in purchasing, holding, and transferring real estate within the confines of this republic. My attention has recently been called to the opinion of Sr. Francisco G. Palacio, governor of Durango, written at the request of the State of Sonora, in April, 1880, and published in this city, in El Nacional, on the 24th of July last. There are no questions at present arising in this country of more importance than those pertaining to the rights of foreigners here; and the deductions reached by the learned counsel in his analysis of the questions are so at variance with my own legal convictions, and, as I am informed, at variance with the opinions of some of the ablest Mexican jurists, and in derogation of the interest of all foreigners, that it would seem that a discussion on the other side of the question would not be unprofitable.

The learned counsel lays down the following propositions as legal conclusions from his premises:

First. In order to acquire lands situated within twenty leagues or less of any frontier of the republic, a foreigner must obtain the individual permission of the President.

Second. That no foreigner can acquire real estate within five leagues or less of the maritime shore of the republic, even with a permission from the President, unless a special law gives the privilege.

Third. That a foreigner loses the right of property which he may acquire in the republic, first, by absenting himself with his family for two years without permission of the Government, except mines, which are preserved in his absence; second, by residing out of the republic, although he leaves in it an agent or representative who possesses in his name. Mines excepted.

Fourth. By transferring the property, either by inheritance, sale, or by any other title, to a person who does not reside in the republic. Mines may be transferred.

In all these cases the property must be sold and the product of the sale delivered to him who last owned the land, with a reduction of ten per cent.

Fifth. That a foreigner who purchases real estate becomes a Mexican citizen unless he manifest his will to preserve his nationality.

The foregoing propositions are claimed to be supported by the laws of March 11, 1842, of January 30, 1854, of February 1, 1856, and that the latter law is declared to be in force by the law of July 30, 1863. The fifth proposition rests upon the third subdivision of article 30 of the federal constitution.

A provisional government was organized by the chiefs of the army who assembled at Tacubaya, on the 28th of September, 1841. The basis of that government was called the plan of Tacubaya. By virtue of that plan the executive was authorized to establish a government. That authority rested on the 7th article of that plan, which reads as follows:

"The faculties of the provisional executive are all those which are necessary for the reorganization of all branches of public administration."

Under that power Santa Anna issued the decree known as the above law of March 11, 1842.

Article 1 of that law provides that foreigners who are denizens and residents in the republic may acquire and possess country or city property by purchase, adjudication, denouncement, or any other title established by the laws. Article 1 thereof provides that no one foreigner can acquire more than two estates within the same department without the license of the Supreme Government. The word department herein is equivalent to a State. Article 8 of said law contains the prohibition from holding lands after an absence of two years, as designated in the third proposition above mentioned. Article 10 of the same law prohibits foreigners from acquiring land within 5 leagues of the coast.

It must be apparent from the said seventh article of the plan of Tacubaya that Santa Anna had no authority to create the foregoing law of March 11, 1842. His power was limited to "*the reorganization of all branches of public administration.*" Such a power was essential to bring into being an established form of government. When the government became *reorganized* the power ceased. The plan of Tacubaya was in the nature of a constitution. It was not intended to invest the law-making power in the executive beyond that of reorganization; that is to say, to put the machinery of government into running order, but not to run it. Hence, any law, *after the formation* of the Government, made by Santa Anna, was *ultra vires*—beyond his power—and therefore null and void.

On the 17th of March, 1853, Santa Anna was again declared to be elected President. Under the basis for the administration of the republic, issued by him April 22, 1853, he seems to only claim power in Article 1, section 3, to "*reorganize all the branches of public administration.*" But on the 30th of January, 1854, he issued a law which declared that of March 11th, 1842, to be in force. He likewise herein exceeded his powers, as he did in decreeing the said law of March 11 itself.

On the 1st of March, 1854, the chiefs of the army assembled at Ayutla and proclaimed the plan of Ayutla. On the 17th of the said month certain officers met in the fort of San Diego, at Acapulco, and modified the plan of Ayutla. The third article of the reformed plan was as follows:

"The provisional President, without any other restriction than that of respecting inviolably individual guarantees, shall be henceforth invested with ample faculties to reform all branches of the public administration, to attend to the security and independence of the nation, and to promote all that may lead to its prosperity, engrandisement, and progress."

On the 8th day of December, 1855, Comonfort came into power as provisional President, and on the first day of February, 1856, he issued the above law referred to of that date, Article 1 of which is as follows:

"Foreigners who are denizens and residents in the republic may acquire, possess country and city property, including mines and all classes of metals and coal, whether by purchase, adjudication, denouncement, or any other title of domain established by the laws or by the mining ordinance."

"ART. 2.° No foreigner can, without previous permission of the Supreme Government, acquire real estate in the frontier States or territories, except twenty leagues from the line of the frontier.

"ART. 3.° Foreigners who desire to obtain the permission of which the preceding article speaks must address their petition to the department of public works, in order that with a review of this, and the report of the Government of the respective State or territory, what is proper may be resolved."

It is by no means clear that Comonfort did not have the power to issue the decree of February 1, 1856. It may be said with some degree of force that the words "*to attend to the security and independence of the nation,*" embraced the power to declare that foreigners should not settle within twenty leagues of the frontier. When the supreme power of a country is wielded by a single man, few questions can arise in the courts concerning the manner of its exercise; yet in this case the power was limited by Article 3 of the plan above mentioned. As a war power, the executive could unquestionably exercise the right of proclaiming the rights of foreigners.

For the purposes of this argument I will admit that the law of February 1, 1856, was valid at the time of its creation; but I cannot admit that the said law received any additional force by its being declared to be in force by the law of July 20, 1863. The latter law wholly appertains to the mode of obtaining, and the persons who may obtain, the public domain. The present constitution of Mexico was adopted February 5, 1857, and in my judgment it swept away both the said laws of 1842 and 1856; and if upon any possible theory it can be contended that said laws are not annulled by the constitution, they are absolutely prohibited by that instrument from being carried into execution. Article 1, section 1, title 1, of the Mexican constitution reads as follows:

"The Mexican people recognize that the rights of man are the basis and the object of social institutions. Consequently it declares that all the laws and all the authorities of the country must respect and sustain the guarantees which the present constitution grants."

What are the *rights of man?* Blackstone, vol. 1st, page 138, says:

"The rights of man consist in the free use, enjoyment, and disposal of all his acquisitions, without any control or diminution, save only by the laws of the land."

Now, the meaning of the constitution is that there shall be no laws of the land which shall limit the above rights of man.

All the rights of Mexican citizens in regard to the possessing of property are vested in foreigners by Article 33 of the Constitution, if not in Article 1. Said Article 33 is as follows:

"Foreigners are those who do not possess the qualities determined in Article 30. They have the right to the guarantees granted in section 1st, title 1st, of the present constitution, save that in all cases the power which the Government has of expelling pernicious foreigners. They are obliged to contribute to the public expenses, in the manner which the law requires, and to obey and respect the institutions, laws, and authorities of the country, being subject to the judgments and decrees of the tribunals, without being able to have any other recourses than those which the law concedes to Mexicans."

The first section of the Mexican constitution is composed of 29 articles. It is the Mexican bill of rights. It does not use the word *citizen* once, but the words *man* and *persons.* The thirty-third article, it will be perceived, guarantees all the rights in said bill of rights to *foreigners.* And further, it guarantees to foreigners, *impliedly,* all the recourses as regards property that Mexican citizens have. Chief Justice Marshall observed, that when the Constitution of the United States said that private property shall not be taken for public use without a just compensation being paid therefor, it *impliedly* said that it could be taken by paying for it. Now, when the constitution of Mexico says that foreigners shall have no other recourses than those which the law concedes to Mexicans, it *impliedly* says that the foreigners shall have all the recourses that Mexicans have. There can be no other deduction drawn from the express language used. It is only requisite that a fair construction be given to the constitution. In speaking of the construction to be given to the Constitution of the United States, the Supreme Court of the United States said in the case of Martin *vs.* Hunter, 1 Wheaton, pages 303, 326:

"The Constitution of the United States, like every other grant, should have a reasonable construction, according to the import of its terms. It is not to be restrained to particular cases, unless such construction grows out of the context expressly, or by necessary implication. The words are to be taken in their natural sense, and not in a sense unreasonably restricted or enlarged."

In the third circuit United States court, in Pennsylvania, in the case of Whiting *vs.* Emmet, 1 Baldwin, page 303, the court uses this language:

"Laws are construed *strictly* to save a *right* or avoid a penalty; and *liberally* to give a *remedy* or effect an object declared in the law."

Sr. José Maria del Castillo Velasco, a member of the constitutional convention in 1856, and at the time of publishing his work, "Observations for the Study of Mexican Constitutional Law," was a justice of the supreme court of Mexico (1871); he says in speaking of Article 33:

"Foreigners have the right to the guarantees granted by the constitution, because they are in *favor of the rights of man;* with one limitation, and that is the power which the Government has to expel pernicious foreigners. The republic gives a free hospitality to all foreigners, and it invites them with the riches of the country."

To follow the line of authorities above cited, there can be no difficulty in reaching the conclusion herein contended for.

But let us suppose that I am wrong in my method of reasoning, and in my conclusions. Then I say that Articles 22 and 27 of the Mexican constitution absolutely *prohibit* the above laws of March, 1842, and of February, 1856, from being carried into execution.

Article 22 is as follows:

"Punishment by mutilation, by infamy, marks, lashes, sticks, torments of any kind, excessive fines, the confiscation of property, and any other kind of unusual or transcendental punishment, are forever prohibited."

Article 27 reads thus:

"The property of persons cannot be occupied without their consent, unless for the cause of public utility and previous indemnification."

Let us now suppose three cases, namely: 1st. That an American should purchase within the belt of twenty leagues from the American frontier; 2d. That another foreigner should purchase within 5 leagues of the coast; and 3d. That another should purchase anywhere in the republic, and should absent himself and family for more than two years. Could either be divested of his property? Certainly not. If the Government should sell the property, and reserve 10 per cent. of the product, for the informer or denouncer, then that would be a *confiscation pro tanto;* which would be in express violation of Article 22°. The probability is, if sold, it would be at a great sacrifice, and might amount to more than a confiscation of half his property in value. I concede that *war* gives the sovereign full right to take the persons and property of the enemy wherever found; but the war power of the Government is foreign to this discussion. We are considering the rights of the Government in the exercise of its sovereignty or municipal power in time of peace. And, further, how could the property in either case be taken, when Article 27 prohibits its being occupied *without the consent of the owner,* unless for public utility? The taking of property under that article is an exercise of the right of *eminent domain,* which is inherent in every sovereign power, and applies to the property of citizens as well as that of foreigners.

It may be further observed that the word *persons* is used in that article, and not *citizen.* So that no *person's* property can be occupied without *his consent,* except for public utility.

It is so clear that the two articles above mentioned completely destroy the said laws of March, 1824, and of February, 1856, that there is no room for argument.

As to the power of the Federal or States governments of Mexico to make any laws prohibiting foreigners from purchasing land of private owners:

Both in the United States and Mexico there are two principles of law fully settled. First. The Federal Congress has no power except those expressely granted by the Federal Constitution, and such implied powers are necessary to carry into effect the powers which are expressed. Second. The State legislatures have all powers not taken from them by Federal or State constitutional limitations. In Mexico, the limitation of the powers of the Federal Congress does not rest upon judicial interpretation, but upon the express words of the constitution. Article 117 thereof reads as follows:

"The faculties which are not expressly conceded by this constitution to the federal functionaries are understood as reserved to the States."

As to the powers granted to the Federal Congress by the constitution. Article 72, subdivision 21, says:

"To enact laws on naturalization, colonization, and citizenship."

Subdivision 24 of said article reads:

"To fix rules to which the occupation and alienation of public lands shall be subject, and the price of them."

The power to regulate *naturalization* and *citizenship,* cannot touch the question of the rights of persons who still continue to be foreigners. The power to regulate *colonization* would undoubtedly include that of determining what *kind* of persons might *colonize* on *public* lands. As no power is given to the Federal Congress to legislate on the rights of foreigners to acquire lands from private individuals, that power, if it resides anywhere, is vested in the State legislatures. This constitutional question has long been settled in the United States by a series of judicial decisions without any dissenting opinions. The earliest utterance of the Supreme Court of the United States on the subject will be found in the case of the United States *vs.* Crosby, 7th Cranch's Reports, page 115, in which this explicit language is used:

"The court entertains no doubt on the subject; and are clearly of opinion that the title to land can be acquired and lost only in the manner prescribed by the law of the place where such land is situated."

In the case of the United States *vs.* Fox, 94 volume U. S. S. S. C. Reports, page 315, the same court held:

"The several States of the Union possess the power to regulate the tenure of real property within their respective limits, the modes of acquisition and transfer, the rule of its descent, and the extent to which a testamentary disposition of it may be exercised by its owners."

In another part of the same descision the court observed:

"The title and modes of disposition of real property within the State, whether *inter vivos* or testamentary, are not matters placed under the control of Federal authority. Such control would be foreign to the purpose for which the Federal Government was created, and would seriously embarrass the landed interest of the State."

In the case of Irvine *vs.* Marshall *et al.*, 20 Howard's Reports, page 558, the same court said:

"The United States being the owner of the public lands within the States and Territories, have the right to say to whom, in what mode, and by what title, they shall be conveyed. We hold the true principle to be this: that whenever the question in any court, State or Federal, is whether a title to land, which was once the property of the United States has passed, that question must be resolved by the laws of the United States, but that wherever according to those laws the title shall have passed, then the property, like all other property in the State, is subject to State legislation, so far as that legislation is consistent with the admission that the title passed and vested according to the laws of the United States."

The foregoing decisions ought to put the question of federal authority over private property in the States of Mexico forever at rest.

The constitution of Mexico goes far beyond that of the United States; and I am of opinion that it deprives both the Federal Congress and the States legislatures of the power to prohibit foreigners from acquiring land anywhere in the republic, except on public domain.

As to the effect of the purchase of land by a foreigner, without a reservation of his nationality:

Article 30, section II, designates who are Mexicans: Among that class are included foreigner purchasers in the following language:

"Foreigners who acquire real estate in the Republic or have Mexican children, provided they do not manifest their resolution to preserve their nationality."

If such a provision can be sustained then a foreigner who purchases land, and fails to make the reservation in the deed, either by accident, mistake, or otherwise, is deprived of his allegiance to his country without any affirmative act of his own. I respectfully dissent from such a doctrine, which cannot be supported, either by the law of nations or natural law.

It was laid down by the Supreme Court of the United States in Sharks *vs.* Dupont, 3 Peters, 242, that—

"The general doctrine is, that no person can, by an act of his own, without the consent of the Government, put off his allegiance and become alien."

This doctrine of perpetual allegiance grew out of the feudal system. But now, in the United States, expatriation is considered a fundamental right, and when manifested by his oath of allegiance to the foreign government, is sufficient to establish the expatriation of such person so as to render him no longer subject to the government of his native country.

But it never has been asserted that one government can compel a citizen, or subject of another government to yield up his allegiance which he owes to his native country against his own *voluntary consent.* The nations of Europe have not admitted the right of voluntarily yielding up allegiance, without the consent of their respective governments. They have consented to it, in several instances, by treaty stipulation. Foreign nations have certain claims of allegiance upon their respective citizens or subjects here and they will not be deprived of it, without the consent at least of subject or citizen; nor will they fail to protect them when called upon for protection, notwithstanding they may have purchased land in Mexico, without manifesting their intention to preserve their nationality.

To recapitulate the conclusions at which I have arrived, I am of opinion:

First. That foreigners may purchase, hold, transfer, make testamentary dispositions of and inherit lands anywhere in Mexico, equally as well as Mexicans, excepting lands of the public domain.

Second. If they should purchase land here, and should absent themselves for more than two years, they cannot be divested of their property.

Third. That foreigners may purchase in any one department or State as many estates as they may desire.

Fourth. If foreigners should purchase lands in the Republic without manifesting their intention to preserve their nationality, such a purchase would not *ipso facto* withdraw their allegiance from their own government; nor deprive them of protection from their government.

The true greatness of a nation cannot be in the triumph of the intellect alone; nor is it altogether in the extent of territory or vastness of population. A nation must have moral and material development. The Government of Mexico cannot afford to play the role of the spider, and assign that of the fly to the foreigner; and thus invite him within her borders by relating to him that gold and silver lie hidden within her hills, and that rich vegetation and fragrant flowers shed their perfumes over her cultivated vales, and then, if he be absent two years, or be within the 20 or 5 league limit perchance, under the color of law, deprive him of his richly cultivated and well-earned estate.

Nor do I believe such is the desire of Mexico. The vast progress made during the last seven years, under the wisdom and influence of General Diaz and the present ex ecutive, evidence their broad views and their welcome to foreigners. And, in my judgment, if the Supreme Court of this nation should lay down the doctrines herein enunciated, they would be in harmony with the views and desire of both General Diaz and the present Government.

FREDERIC HALL.

HOTEL ITURBIDE, MEXICO, *August* 8, 1883.

RIGHTS OF FOREIGNERS IN MEXICO.

SECOND REPORT.

Referring to my No. 60, of the 29th ultimo, as to the rights of foreigners to acquire and hold real estate in Mexico, I have the honor to make the following additional report on the same subject.

This report not only deals with the subject as stated above, but considers two other points intimately connected therewith, namely, the responsibilities of the foreign landowner and the naturalization of all foreigners domesticated in Mexico, unless provided with *cartas de matricula.*

The great interest taken by Americans in the agricultural and mining interests of this country make a full understanding of these laws of much importance.

I have written this report for publication that I might at one time fully reply to the many inquiries made of me on the various points discussed therein.

This article will deal with (1) their rights to acquire, hold, and transfer real estate; (2) the obligations which this right imposes upon them; and (3) their becoming naturalized Mexican citizens by residing in the country without a *carta de matricula.*

In speaking of such Mexican laws it is well to note that they are in a very mixed condition. The former rapid changes in the political control of the country involved many changes in the rights accorded to foreigners.

In the absence of any codified laws since the advent of the Diaz Government in 1877, all these rights must be sifted from out the previous conflicting legislation. In this it is often difficult to determine which laws are now in force. The constitutionality of some laws now in force is also a matter of doubt. The importance of this subject has of late brought out several letters upon the general subject.

In a recent report (my No. 60) I gave copies of two of these letters. Mr. Frederic Hall, an American lawyer, now of the City of Mexico, wrote an opinion holding:

First. That foreigners may purchase, hold, transfer, make testamentary disposition of and inherit lands anywhere in Mexico, equally as well as Mexicans, excepting lands of the public domain.

Second. If they should purchase land here, and should absent themselves for more than two years they cannot be divested of their property.

Third. That foreigners may purchase in any one department or State as many estates as they may desire.

Fourth. If foreigners should purchase lands in the republic without manifesting their intention to preserve their nationality, such a purchase would not *ipso facto* withdraw their allegiance from their own Government, nor deprive them of protection from their Government.

Mr. Luis Mendez, a Mexican lawyer of the city of Mexico, in a recent letter, substantially agrees with Mr. Hall in all except his fourth conclusion. The letter of Mr. Mendez, together with the editorial comment thereon by the Mexican Financier, is given in inclosure No. 1 herewith.

One important fact as to the second conclusion of Mr. Hall, is given by Mr. Mendez in his note 7, where he states that lands have been purchased and held for many years without question by persons who have absented themselves, and that it is a constant practice for non-residents to purchase and hold such estates; that he has administered such estates, and that the rights of his principals have never been questioned. He also states that this obtains generally in the Republic and even within the 5 leagues' coast limit. It will be noted, however, that he does not claim that any right so claimed has been judiciously decided in favor of the foreigners thus holding; nor does he specially refer to the 20 leagues' frontier limit.

The views given by these two gentlemen are extremely favorable to foreigners. But it must be noted that one is an American lawyer who writes regarding the laws of a foreign country, while the other is a Mexican lawyer who has a large clientage of foreigners. While, therefore, their views are of much value, and while their interpretation would be extremely favorable to foreigners and of great value to American interests, yet for a full understanding of the case more evidence is needed.

I have no information as to any judicial decision on any of the points mentioned, and presume that had there been any such they would have been mentioned by Mr. Hall and Mr. Mendez. Assuming, therefore, that there are none, we come to consider the laws of the country as now enforced.

As to this frontier, I know from personal knowledge that no foreigner can legally purchase real estate of any sort without a permit. I know of one case where real estate was held for many years by an American lady, lately deceased, by a *State* permit. I know of many cases where such permits have been asked as a notorious pre-requisite. Where such permits were not obtained sale was either broken off or the property was held by the foreigner (American) by mortgage or a similar title. * * *

I am reliably informed that in Mexican deeds, at least so far as regards this frontier, the preamble must recite the nationality and residence of the parties, and that if the purchaser be a foreigner, and the property or any portion thereof lies within 20 leagues of the frontier, the fact that he had a permit to purchase, and that it was then and there produced, must be recited. These permits are either general or special. If the permit be general it must be copied in full as part of the preamble of the deed; if it be special, for a particular piece of property, it may be referred to in such manner as to fully identify it and show the right to purchase. That failing in these requisites, the deed would not be executed by the notary, nor would it be legal if made by him in disregard of these formalities.

I cannot point to any case where such deeds have been declared illegal, but can state that I have been unable to learn of any deed made within the last twenty years which disregards these formalities.

From cases which have come to my knowledge and from many inquiries I can state that the 20 leagues' limit is in force here, and has been for many years.

In sharp contrast with all the four conclusions of Mr. Hall, and to the opinion of Mr. Mendez concurring in his three first, I give the following:

Governor Francisco Gomez Palacio, of the State of Durango, recently gave an opinion to the State of Sonora. Governor Palacio is of course a Mexican, and as a lawyer and political authority his opinion must be entitled to great weight. His opinion, as printed in The Two Republics, newspaper of the city of Mexico, in its issue of August 25 last, is as follows:

> 1. Foreigners residing in the Republic of Mexico may acquire all kinds of landed property, including mines of every description, by the same titles that the civil laws establish for Mexican citizens.
>
> 2. The exceptions to the rule are:
>
> A. That, to acquire land situated 20 leagues or less from any frontier of the republic, a foreigner must obtain the permission of the President.
>
> B. No foreigner can acquire real estate situated within 5 leagues or less of the coast line of the republic, not even with the President's permission, unless by a special law.
>
> C. No foreigner, born or naturalized in a country bordering on the republic, can acquire public lands by "denouncement," when said lands are situated in a State or Territory bordering on it.
>
> 3. A foreigner loses all right to landed property he may have acquired in the republic:
>
> A. By absenting himself with his family from the country for two years without governmental permission, except in the case of mines which may be retained even in absence.
>
> B. By residing permanently out of the republic, even when the owner leaves a a representative or attorney with full rights to act for him. Mines are not included.
>
> C. By transferring the property by inheritance, sale, or any other title to any person not residing in the republic. Mines are excepted.
>
> In all of these cases the property must be sold and the product of the sale, minus a deduction of 10 per cent., delivered to the former owner.
>
> D. By not maintaining on territory acquired by "denouncements" as public land, which in no case must be more than 25,000 hectares (about 2½ acres each) to each "denouncer," one inhabitant for each 200 hectares of its extension, so that the land may be inhabited at least to that extent for four months in one year.
>
> 4. The responsibilities of the acquisition of real estate by foreigners in the republic of Mexico are:
>
> A. The obligation to subject themselves to the laws in force or which may be enacted respecting the holding, transfer, use, and improvement of property, and submission to the judgments of the Mexican tribunals in everything relating to it.
>
> B. The obligation to pay all lawful taxes on the property.
>
> C. To aid personally and with his means in preserving order and security in the place where he may reside, exclusive, however, of disturbances caused by political revolutions or civil war.
>
> D. The duties of a Mexican citizen, which the foreigner becomes on acquiring real estate, unless he declares beforehand his wish to preserve his nationality.

In a letter to The Two Republics, given in its issue of August 25 last, Hon. I. L. Vallarta, ex-chief justice of the supreme court of Mexico, says, referring to the opinion of Governor Palacio above:

> Before becoming acquainted with the opinion of Mr. Gomez Palacio, I had an opportunity of analyzing the same question he elucidates, and I obtained results so entirely in consonance with those of that distinguished jurist, that with great satisfaction I saw, upon reading El Nacional, which published the article to which I refer, *that our opinions were perfectly in accord.*

Coming from the ex-chief justice of Mexico, that would seem to be pretty high authority.

The letter of Judge Vallarta and the editorial comments of The Two Republics are given herewith as inclosure No. 2.

It will be seen on reading Judge Vallarta's letter, that while he is "perfectly in accord" with Governor Palacio, yet he actually disagrees with the opinion given by Governor Palacio in the subdivision D of his fourth opinion, and agrees with Mr. Hall that mere purchase of land does not of itself make the purchaser a Mexican citizen.

Further reference to this point is made toward the close of this article.

Two Mexicans, one an ex-chief justice, one the governor of a State, and both eminent lawyers, would seem to know more as to the laws of Mexico and probable practices thereunder than one American lawyer and one Mexican lawyer who has a large clientage of foreigners.

But there is other and equally strong testimony in favor of the views of Governor Palacio and Judge Vallarta.

Mr. Manuel Aspiroz, member of the National College of Lawyers of the city of Mexico, is the author of the "*Codigo de Estranjeria de los Estados Unidos Mexicanos*," published in Mexico by Jens and Zapian, 1876. This work is the standard in Mexico, was published under the auspices of the ministers of foreign relations and public instruction and adopted for use in the National School of Jurisprudence.

Mr. Aspiroz fully confirms *all the opinions* given by Governor Palacio, and agrees with those given by Judge Vallarta in all except that regarding the change of citizenship upon purchase of lands by the foreigner.

As the subject is of such importance, I give herewith translations of various portions of Mr. Aspiroz, foreign code, referred to above.

As to Governor Palacio's first opinion, he says, page 26, article 155.

> Foreigners *domesticated* and *residing in the republic* are capable of acquiring and possessing private lands, or house property (bienes raíces de propiedad privada) and mines of all classes.

As to the second division, subdivision A, he says, page 27, article 158:

> No foreigner can, without previous permission of the President of the republic, acquire land or house property (bienes raíces) in frontier States or Territories, except 20 leagues from the frontier.

As to subdivision B he says, page 27, article 159:

> Likewise foreigners are absolutely prohibited from acquiring land property (propiedad rustica) within 5 leagues from the coast.

As to subdivision C he says, page 37, article 216:

> The acquisition of public lands (terrenos baldíos) is absolutely prohibited to natives of the respective bordering nations or to persons naturalized therein.

As to the third opinion he says, page 27, article 162:

> The foreign owner of land or home property (bienes raíces) loses his right to keep his title in them in any of the following cases:
>
> I. Absenting himself from the republic with his family for more than two years without permission from the Government.
>
> II. Residing outside of the republic even though he has therein a person who represents him in the possession of said property.
>
> III. Transferring the property by inheritance to a person not residing in the republic.

By article 165, page 28, Mr. Aspiroz says that mining property is exempt from forfeiture by such absence, without limit as to time or circumstances, providing he is represented by resident partners who continue the business.

As to the sale of forfeited lands mentioned by Governor Palacio under head of the third opinion, subdivision C, he says, pages 27 and 28, article 163:

> The foreigner, comprehended in any of the cases of the previous article (see above), is obliged to sell his property right within two years, counting from that which verifies the absence or transfer of title. If not sold, the public authority must do it.
>
> ARTICLE 164. Sale being made by the public authority the product of the property shall be deposited at the disposition of the (former) owner, but if it be by denunciation, one-tenth part of the product shall be applied to the denouncer, and the other nine parts shall be reserved for the absent foreigner.

As to D of Governor Palacio's third opinion, Mr. Aspiroz, in his articles 228 and 229, pages 38 and 39, substantially confirms the whole, and adds that these conditions as to maintaining the required number of inhabitants for at least four months in each year *continue for ten years*, after which title can be obtained.

The responsibilities of the foreign land owner, as stated in Governor Palacio's fourth opinion, subdivisions A, B, and C, are maintained by Mr. Aspiroz in articles 180, 181, 183, 184, and 230. As they are the usual and necessary laws it is unnecessary to give them in full.

The subdivision D, which concludes the opinion of Governor Palacio, says that the foreigner becomes subject to the duties of a Mexican citizen upon purchase of lands unless he declares beforehand his wish to preserve his nationality. Mr. Aspiroz says, page 39, Article 231:

> That foreigners who have acquired property rights in the republic may naturalize themselves therein, it is enough that, making known their purchase before the political authority of the place of their residence, they ask for the letter of naturalization.

Article 200, page 34, says:

> Naturalization may be *expressed*, *tacit*, or *presumptive*.

Article 16, page 4, says in effect that it is indispensable for naturalization that the person should be present, and that he and the Government must consent thereto. By article 17, same page:

> I. *The consent of the person* is shown by—
> A. The absolute renunciation of his nationality.
> B. The solemn promise or oath of fidelity to the new sovereign.
> II. *And the consent of the sovereign* is obtained by admitting the foreigner to the enjoyments of the rights of its subjects, except those which pertain exclusively to those native born.

By article 18, same page:

> *The consent* may be expressed, tacit, or presumptive, and *consequently the naturalization*.
> I. *It is expressed* when manifested in clear words in the petition of the foreigner and in the letter of naturalization.
> II. *Tacit*, that which shows in an unequivocal manner certain acts determined by the laws as causes of naturalization executed freely by the foreigner.
> III. *Presumptive*, that which is inferred by actual residence, maternity, or paternity, not being in contravention to the express laws.

It will be seen that Mr. Aspiroz and Judge Vallarta agree in everything stated by Governor Palacio, except the change of citizenship on purchase of lands by the foreigner unless he declares at the time his wish to preserve his nationality.

Omitting this point and we find these two authorities concurring in all the opinions expressed by Governor Palacio. These three I consider by far the most valuable and authoritative obtainable, short of a decision by the supreme court of the nation.

The subject of citizenship is of great *personal* as well as *financial* interest. As to the laws of Mexico on this point we find Judge Vallarta agreeing very forcibly with Mr. Hall, that such purchase does not *per se* effect a change of citizenship, while Mr. Mendez, notwithstanding his liberal interpretation of these laws on the other points, agrees with Governor Palacio and Mr. Aspiroz that such purchase without reservation would change the citizenship. In this conflict of opinion it may be well to consider one or two points.

The natural right of man to improve upon the conditions of birth, to change his place of residence and his allegiance, is universally admitted in all republican states.

The *permanent* change of residence, especially with the family and household goods, is presumptive evidence of a tacit intention of change of allegiance.

This presumptive proof may be overcome by the verbal or written act of the individual, which to be efficient must accord with the law of the place of domicile.

It does not necessarily follow that this presumptive proof of a tacit change of allegiance will *per se* entitle him to the rights of a naturalized citizen nor forbid the protection accorded him by the land of his birth. The first is governed by the law of the place of domicile; the second by the law of the place of birth, international law, and treaty stipulations.

In the case of Mexico, that Government has diplomatically maintained that all foreigners domiciling themselves in Mexico and desiring to retain their nationality must provide themselves with a *carta de matricula* from that Government.

Since 1873 this claim of Mexico, so far as regards citizens of the United States, has been diplomatically acknowledged by the United States. Hon. John W. Foster, United States minister to Mexico, issued a circular to consular officers of the United States in Mexico upon this subject, dated December 5, 1873, in which he says:

> I desire to call your attention to the Mexican law for the matriculation of foreigners, and to request that you advise all citizens of the United States * * * to comply with its provisions.
>
> It is the duty of American citizens who come to Mexico to engage in commercial or other pursuits to obey the laws of the country and to conform to all the requirements of its Government not in contravention to treaty stipulations or international law. The Government of the United States does not regard the provisions of the law of matriculation as illegal nor unduly oppressive in form, and it cannot properly be protested against, unless unusual or unreasonable proof of citizenship should be required in a particular case. * * *

This letter of Mr. Foster is dated ten years ago, and its provisions have been reiterated by Judge Morgan, the present minister to Mexico. There can, therefore, be no reasonable doubt that all American citizens who are now domiciled in Mexico without the *carta de matricula* have, according to *Mexican* law—admitted to be legal by the diplomatic authority of the United States—lost their right to claim protection as American citizens, and have become *for the time being and during their further residence in Mexico* (unless they hereafter ask for and obtain the *carta de matricula*) to all intents and purposes naturalized Mexican citizens.

This statement will apply whether they have or have not purchased real estate without reserving their citizenship.

Now as to the real-estate and citizenship clause of Governor Palacio's opinion.

The United States has formally recognized the right of Mexico, which, indeed, is inherent in all independent states, to determine how foreigners residing within her borders shall retain their former allegiance, or how they will forfeit the same, and become for the time naturalized Mexican citizens without reference to purchase of real estate.

The opinion of Governor Palacio, subdivision B of his fourth opinion, *is the one now held by the Government of Mexico, is diplomatically asserted*, and this action has been recognized by Hon. P. H. Morgan, the present minister of the United States to Mexico. In a circular, dated May 24 last, he says:

> I have to request that you will, as far as possible, inform citizens of the United States who intend to purchase real estate within the Republic of Mexico, *that unless they declare* it to be *their intention to conserve their nationality* as citizens of the United States, *they become*, under article 30, section 3, of the Federal Constitution, in *the opinion of the Government of Mexico, citizens of Mexico*, and *that to such persons no "carta de matricula,"* acknowledging their foreign nationality, *will be issued* from the department of foreign affairs.
>
> *To avoid all question, the reservation of citizenship should, in my opinion, be made in the act of purchase.*

I have italicized three important points in the circular. The first is that unless the purchaser does reserve his nationality the Government of Mexico holds that under article 30, section III, of the federal constitution he becomes thereby a Mexican citizen. The second says, that *to such persons no carta de matricula* will be issued. The third gives the opinion of Minister Morgan that, to avoid all question, the reservation should be made in the act of purchase.

To enable the reader to understand the constitutional provision above cited I give herewith the whole article 30 in Spanish, and my translation of the same.

[Original, in Spanish.]

ART. 30. Son Mexicanos:

I. Todos los nacidos dentro ó fuera del Territorio de la Republica de padres Mexicanos.

II. Los extranjeros que se naturalicen conforme á las leyes de la federacion.

III. Los extranjeros que adquieron bienes raíces en la Republica ó tengan hijos Mexicanos, siempre que no manifiesten la resolucion de conservar su nacionalidad.

[English translation.]

ART. 30. Are Mexicans:

I. All persons born within or without the territory of the republic of Mexican fathers.

II. Foreigners that become naturalized conformably to the laws of the federation.

III. *Foreigners who acquire land or house property in the republic*, or have Mexican (born) children, *always that they do not manifest the resolution to conserve their nationality*.

I find no modification of this clear and emphatic statement in any of the amendments to the constitution.

It is to be presumed that the interpretation of the constitution as made by the executive will be sustained by the judicial authority, and therefore this clause may be held to be legal as regards Mexico.

It may be claimed, as indeed I should wish to claim as regarding Americans domiciled in Mexico, that change of allegiance can only be effected by a specific act by the individual in conformity with the law of the place of domicile. But ignorance of law is not a valid plea, and where a law has been in force so long and its provisions acquiesced in by the diplomatic agent of the United States, all tenable objections thereto would seem to fall.

CONCLUSION.

It would, therefore, appear to me that the opinions of Governor Palacio, herein given, as to foreigners acquiring, holding, and transferring lands and house property in Mexico are the best interpretation obtainable until the same shall be judicially decided by the supreme court of the nation.

It would also appear to me that all Americans residing in Mexico and who have not obtained, whether from ignorance or other cause, the requisite *carta de matricula*, are *by the laws of Mexico* and the diplomatic assent of the United States, *for the time being and during their continued residence* in Mexico (unless they hereafter ask for and obtain the *carta de matricula*), are to all intents and purposes naturalized Mexican citizens.

To those who have purchased real estate, and in that act have reserved their American citizenship, it would seem probable that a *carta de matricula* would be issued by the Mexican Government.

To those, however, who have purchased without a permit for the frontier, and without making reservation in the act, or having a *carta* *de matricula*, there would seemingly be no remedy during their further residence in Mexico from being considered as naturalized Mexican citizens.

WARNER P. SUTTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Matamoros, September 24, 1883.

[From the Mexican Financier, city of Mexico, August 25, 1883.]

THE RIGHTS OF FOREIGNERS.

We return again this week to the discussion of the very important subject of the property rights of foreigners in Mexico, by supplementing the able article of Hon. Frederic Hall, printed two weeks ago, with the treatment of the matter by a Mexican, the Hon. Louis Mendez, one of the most distinguished members of the bar in this capital. Mr. Mendez makes a most scholarly and thorough argument, showing himself a master of modern jurisprudence. With his fine interpretation of the constitutional principles of the Mexican Republic, in their application to the case in point, the thoroughly grounded quality of his scholarship is made evident in his exact knowledge of American laws and precedents bearing upon the question.

The position which Judge Hall assumed was objected to in some quarters as being simply the opinion of an American who viewed the laws of Mexico largely from the stand-point of his own country's laws. He took, however, the very sound position, that the Mexican constitution being modeled closely upon the Constitution of the United States, the interpretations of that instrument which had stood the test of the highest tribunals of the land would also be found to apply equally well in this country; a view which is supported by the fact that the United States precedents are frequently cited in the Mexican courts in confirmation of the correctness of the decisions there rendered, just as English precedents are cited in the United States. While Mexico inherits its common law from Spain, the United States is the mother-country of this republic so far as constitutional law is concerned.

The fundamental soundness of the position taken by the American jurist is confirmed by the thorough argument of the Mexican, Mr. Mendez agreeing practically with Judge Hall's deductions, with the exception of one point, that concerning the status of the foreigner who acquires real estate in this republic without declaring his intention to preserve his citizenship in his own land. In this matter Mr. Mendez does not find Judge Hall's position a correct one, and his own agrees with that of the American minister, Judge Morgan. It is a function of the Federal Government to prescribe the conditions under which foreigners may become citizens of the republic, and one of the ways in which an alien becomes a citizen is by purchasing land without his declaring his intention to retain the citizenship in his own country. A foreigner is presumed to know the laws of the country in which he takes up his abode, especially a law so general in its bearing, and if he purchases real estate without reserving his alien condition by special declaration, the same constitutes a voluntary act whereby he renounces his allegiance to his own Government, and he tacitly becomes a Mexican citizen. We understand that Mr. Mendez will favor us with a discussion of this point in a future article.

In all other matters, however, the views of Mr. Mendez agree with those of Judge Hall, and the position of the latter thereupon, so amply fortified by his own arguments and citations, appears, to our mind, to be made impregnable by the well-backed opinions of his eminent Mexican colleague. It must be gratifying to all liberal-minded Mexicans to learn that the ground of their own country in this matter is, in reality, far more broad and advanced than that of the United States; some of the States of which have exceedingly illiberal restrictions upon the property rights of aliens.

Mr. Mendez considers the subject both from a national and State stand-point, and shows conclusively that the regulation of property is exclusively an affair of the individual States. So far as the republic is concerned, foreigners have the same rights in property as citizens do.

It is of interest to learn that here in the federal district there is much real estate held by foreigners who reside abroad, and have not been in the country for years, notwithstanding which no move has ever been made to declare their property forfeited on that account. Mr. Mendez, in his extensive practice, has always acted upon the principles which he maintains in the present article, numbering many of these alien property-holders among his clients, and he is too good a lawyer thus to imperil the interests of his clients without satisfying himself that his position was the correct one. Foreign holders of real estate in this republic, and those proposing to invest in the same, may therefore be encouraged. Mr. Mendez and Judge Hall are not alone in their opinions, which, we are assured, are shared by many of the most eminent statesmen and learned jurists in the republic.

RIGHTS OF FOREIGNERS IN MEXICO.

MEXICO, *August* 12, 1883.

DEAR SIR: Yesterday as I was writing a few notes concerning the legal capacity of foreigners to acquire and possess real estate in this republic, and to dispose of it by contract or will, you had the kindness personally to place in my hands the last number of your excellent periodical, and to call my attention to a notable article by an American lawyer, the Hon. Frederic Hall, concerning the same subject. During our conversation you expressed the wish to have the opinion of a Mexican lawyer, and, although I am aware that mine is of but little weight, and that you would have done better to have applied to some one of those distinguished counsel whose brilliant ability adorns our bar, still, as you insisted on having mine, it is but owing to your courtesy and the deference with which you treated me, to fulfil your request, putting aside that which might seem egotism or false modesty in view of the interest which is taken at present in this subject and its very great importance for existing and future interests.

I have read attentively the article by Mr. Hall, and it is with pleasure that I assure you that his conclusions 1st, 2d, and 3d are the same as those which I have always held, advised, and practiced, both because I consider them to be derived directly from our written law, and also because they seem to me to be the most compatible with the actual necessities of Mexico, and with the principles of modern democracy.

The maxim that the "*soil belongs only to its native inhabitants*," inasmuch as relates to the individual, seems to me to be a relic of those primitive times in which the *foreigner* and *enemy* were confounded both in word and in idea, and when the law declared "*Adversus hostem, aeterna auctoritas esto.*" And it is very satifactory to me that Mr. Hall should have been guided by his experience and learning to adopt the same views, overcoming the influence which naturally might have been brought to bear upon his opinions by the restrictive spirit of the legislation concerning strangers which still exists in some of the United States; as he himself declares, with a sincerity which does him honor, "the constitution of Mexico goes far beyond that of the United States."

Nevertheless, I differ from Mr. Hall in his fourth conclusion, in which he states that "if foreigners should purchase lands in the republic without manifesting their intention to preserve their nationality, such a purchase would not, *ipso facto*, withdraw their allegiance from their own Government, nor deprive them of protection from their Government." In the course of this study I will give the reasons for this difference, and will also indicate some of the deductions by him which I do not admit absolutely.

I have a reluctance in writing these lines for your paper, for fear that they may be wearisome to your readers; surely a discussion of the subject from the point of view of political economy would be more attractive to them because more in accordance with the spirit and object of the Mexican Financier; but I must leave to statesmen, and to abler pens than mine, the study of what may best aid this country in the path of progress on which it has entered with so much zeal, considering her condition, foreign and domestic, the character of her inhabitants, and the century in which we live. My intention is to confine myself to the study of actual legislation, and to ascertain whether, according to the laws in force to-day in the republic, foreigners, whether domiciled and resident or not, who have acquired and now possess real estate within its limits, or who may acquire and possess such in the future, may be safe and unmolested in its full enjoyment and free disposal equally with Mexicans, or if they are to be subject in respect to such property to the restrictive conditions imposed by the laws of March 14, 1842, and February 1, 1856. I will then pass to the discussion of certain points incidental to the above question. In order to diminish the ennui which it may cause to your readers, I will be as brief as the subject permits.

But in this study I shall have to combat not only the views which the learned and distinguished statesman, Sr. Gomez del Palacio, expressed in his opinion of April 8, 1880, and with which Mr. Hall also disagrees, but also that of the able writer Sr. Azpiroz, who in his work "Codigo de Extranjeria de los Estados Unidos Mexicanos," presents, with slight variations, the same conclusions as Sr. Gomez del Palacio, both deriving them from the combination of the laws of 1842 and 1856.

I will not attempt to conceal how much I am deterred by opponents whose learning and patriotism are so well known and so highly esteemed that their doctrines have been repeated in the highest places, but I am encouraged to the discussion by the invitation which Sr. Gomez del Palacio extends, with his characteristic sincerity, in the letter to El Nacional with which he accompanied his opinion. This opinion has the unassailable advantage of being a complete historical study of the special laws on this subject since the colonial period, and it has also the merit of having aroused to a high degree the investigation from a legal point of view of a subject of immense importance, present and future, to Mexico.

I have already indicated that the conclusions of both Sr. Gomez del Palacio and Sr. Azpiroz are a *résumé* of the provisions of the laws of 1842 and 1856, which, according to both writers, should be considered as combined, the latter law being declaratory of the former, except in those points which are clearly modified or expressly abrogated by the latter.

As this method of viewing both laws is in direct opposition to what has always been observed in practice, and which may be considered as a custom, especially with regard to that of 1842, it seems to me advisable to begin by setting forth the reason why the generally received opinion is that the law of 1856 annulled all the provisions of the law of 1842, excepting only those which it reproduced in some form or other.

The law of 1842, passed by the dictatorial power created by the bases or articles of the central authority, known as the "Bases of Tacubaya," does not seem to have been very efficacious.

The seventh of those bases, from which it assumed to derive its authority, as the law itself states, only gave to the provisional executive "*the powers necessary for the reorganization of all the branches of the public administration*," and it is difficult to consider that the law which I am discussing is an act of administration. Moreover, the fifth of the bases obliged the executive to be responsible for his acts to the first constitutional congress, which condition itself alone gave a precarious existence to such acts.

One year afterward (June 12, 1843), and in consequence of a new "pronunciamiento" which dissolved the congress established by the "Bases of Tacubaya," the "Bases of political organization of the Mexican republic" were promulgated by a national legislative junta which impliedly guaranteed the property of foreigners equally with that of Mexicans (Art. 709, § 13).

On the re-establishment of the federal republican form of government, and with it the constitution of 1824, an act for the confirmation and reformation of that constitution was passed on May 23, 1847, which contained the following articles:

"Art. 5. In order to *assure the rights of man* which the constitution recognizes, a law will fix the guarantees of liberty, security, *property, and equality* which will be enjoyed by *all* the inhabitants of the republic, and will establish the means for carrying them into effect.

"Art. 11. It is an exclusive power of the general congress to establish regulations for colonization and to enact laws, in accordance with which the authorities of the union shall fulfill their constitutional faculties."

Therefore all restriction in regard to the property of foreigners remained uncertain, so to speak, until the law promised in Art. 5 was passed.

Thus it came about that, when the absolute Government was again fully established, it was considered necessary to declare in the law on alienship passed by it January 26, 1854, "*that the decree of March* 14, 1842, *on the acquisition of real estate by foreigners* (*Art.* 5) *was in force in all its parts.*"

But in the beginning of 1856 the military dictatorship of General Santa-Anna began to vacillate. On the 1st of March of that year the Plan of Ayutla was proclaimed, which, reformed in Acapulco on the 11th, triumphed in the capital of the republic on the 13th of August, 1855. The leaders of this revolution were the men who, later, formed and proclaimed the federal constitution of February 5, 1857, which is to-day the basis of the general law of the country.

The first effect of every change in institutions when produced by an armed revolution, is to throw in doubt the binding force of the laws and decrees issued by the overthrown administration on the one which is considered as illegitimate and in usurpation of the Government. This effect was produced with those passed by the Government which succumbed to the assaults of the national revolution of Ayutla. It was thought that all its acts needed to be revised, and the measures for making such revision were proposed and adopted.

Under these circumstances the law of February 1, 1856, was issued by President Comonfort, who also exercised a dictatorship until the Congress, which assembled in a few days, issued the constitution of the republic. In this law there is not a single reference made to that of 1842, which, as we have just seen, had been revived by the fallen Government scarcely two years before. And, nevertheless, a comparative study of both convinces one that that of 1842 served as a base for the formation of that of 1856. Sentences and entire articles of the former are reproduced verbatim in the latter.

Other articles were modified, and some suppressed. The arrangement of the sections is almost identical.

From the exactness of this correlation, and because the law of 1856 forms in itself a system which does not require for its completeness that any of the suppressed articles should enter into it, it has been deduced that either the legislator of 1856 did not hold the law of 1842 to be in force, and therefore he did not think it necessary to annul it expressly, or, if he held it to be in force, he annulled such parts of it as he expressly omitted in that of 1856.

"When an old law," says Demolombe, "and a new law treat of the same subject-matter, and the new law does not reproduce some special clause of the old, without, however, annulling it expressly, nevertheless we are justified in declaring that such a clause is annulled. In fact, if in general it is to be presumed that the legislator who did not expressly annul, did not wish to prevent what is known as the *fusion* of the two laws, the same is not the case when the new law creates, on the same subject-matter, an entire and complete system, more or less different from that of the old law. It would not then be wise, according to the observation of Monsieur Mérilhou, to change the spirit and unity of this new law by combining the provisions, often dissimilar, of the old law with those of the new one which has replaced it."

If, notwithstanding the exact application which this philosophical doctrine bears to this case, one should still doubt what was the spirit which inspired the law of February 1, 1856, I consider that all doubt would disappear when we consider the widely liberal spirit of the revolution which brought President Comonfort into power. This spirit shows itself in a striking manner in the "Estatuto Orgánico provisional de la República Mexicana," enacted on May 23, 1856, by the same president. In this statute, which was in force until the promulgation of the constitution of 1857, we find the following declarations, the importance of which is readily perceived:

"ART. 5. The exercise of civil rights is independent of the quality of citizenship; consequently, with the exception of those cases in which this qualification is demanded, all the inhabitants of the republic will enjoy civil rights according to the laws and the guarantees of this statute; *but foreigners in Mexico will reap no advantages from rights and guarantees which are not also conceded by treaty to Mexicans in the countries to which such foreigners belong.*

"ART. 30. The nation guarantees to its inhabitants liberty, security, property, and equality.

"ART. 34. No one may be deprived of the right to choose his dwelling-place, to change it at pleasure, and to retire from the republic with his goods, saving only the rights of third parties and the completion of the duties of the employment or position which he may fill.

"ART. 62. Every inhabitant of the republic is at liberty to employ his capital or labor in such honest profession or occupation as may seem best to him, subject to the general directions which the laws may establish for the public good.

"ART. 63. Property is inviolable, whether it consist in goods, rights, or in the exercise of some profession or industry.

"ART. 65. Property may be seized in case the public utility demands, but only on legal proof and accompanied with previous and sufficient indemnification.

"ART. 66. Works of public utility are those which have for object to provide the nation with uses and enjoyments of common benefit, whether they be executed by the government or by private enterprises duly authorized.

"ART. 77. These guaranties are general and include all inhabitants of the republic, and are obligatory on all authorities therein, only subject to the ordinary general laws are:

"II. The rules to which are to be subject the entrance and stay of foreigners in the country, and the right of these to exercise their professions and trades, *enjoying in everything else the guarantees which this law gives.*"

Thus it is evident that, even if the articles of the law of 1842 which were omitted by that of 1856 were not tacitly annulled by the latter, at all events they were by the Estatuto Orgánico, promulgated four months afterward; because these articles cannot be reconciled with the equality of guarantees and civil rights which this statute granted to Mexicans and foreigners.

For example, how can this equality be reconciled with the limitation which in article 3 is placed on the foreigner of not acquiring more than two country estates in the same department without the permission of the Government? How conciliate with the inviolability of property the provision of article 8 by which a foreigner, on absenting himself for more than two years without permission from the Government, would have to sell his real estate on the pain of having it sold by the authorities, and that the same would happen with property which by inheritance or other title might pass to a person not resident in the republic? Finally, how can one reconcile with the guarantees of the statute the prohibitions of articles 9 and 10 against acquiring estate in the departments on the frontier or within 5 leagues of the sea?

But the articles 3, 8, 9, and 10 of the law of 1842 were exactly the ones omitted in that of 1856.

Therefore these restrictions became abolished by this law and by the provisional statute, and, as no other law has revived them, it is a logical conclusion that it is an error to consider them as in force to-day. And, as the other dispositions of the law of 1842 *were* reproduced, with or without modification, in that of 1856, this should also prove to us that in no way whatsoever can the often-cited law of 1842 be in force now.

Let us now examine the fate which has overtaken the law of 1856.

The organic provisional statute did not alter in substance the dispositions of that law. Its clause establishing that *foreigners* must be domiciled and resident in the republic in order to take and hold real estate, can be reconciled with the guarantees granted in the statute to the *inhabitants*. The States did not have under the statute a separate and independent sovereignty and power to regulate by laws their own governments and internal economy. They were ruled by governors appointed by the President of the republic, and had only the power to decree "that which might be expedient and in conformity with the laws in respect to the acquisition, alienation, and transfers of estates which may belong to the State." Art. 117, § VIII.

But on February 5, 1857, the federal constitution produced a radical change in the centralizing form of government of the statute. The guarantees were declared *rights of man* to be enjoyed by *foreigners* equally with Mexicans (Art. 33). With this disappeared the necessity of inhabiting the country and of residing or being domiciled in it in order to possess and dispose of property acquired under the protection of the inviolability proclaimed in Art. 27. The *rights of man* have this characteristic quality, that, being considered as innate in every man whatever his state, condition, or residence, they will be respected in him by the laws and authorities of the republic, within the limits of their jurisdiction. The constitution thus re-establishing the sovereignty and liberty of the States in all concerning their internal management, without other restrictions than those provided for by this federal compact, recognizes as one of the sovereign attributes of each State, that of legislation concerning the acquisition and transmission of personal and real property, situated within its limits. There is nothing in the federal constitution which places the laws of landed property under the legislative jurisdiction of the National Government, whether the owners be Mexicans or foreigners. Legislation on this subject, in Mexico as in the United States, is the *exclusive* right of the separate States, with the sole restriction that the rights of man must not be violated; and the States *have* exercised this right which the constitution reserves to them.

As almost all of them have adopted the civil code, issued in 1870 for the federal district and the territory of Lower California, it is in this code that we should properly seek to learn what are the rights of foreigners in respect to the acquisition, possession, and transmission of real property.

This code recognizes the division of persons into Mexicans and foreigners (Art. 22) and sanctions the principle that the civil law is equal to all without distinction of persons, except in those cases especially mentioned (Art. 1.)

Now there is not to be found in the whole code a single clause which establishes any in equality between foreigners and Mexicans in the enjoyment of civil rights.

In addition to this might be cited various articles of the code, in order to show the eminently liberal spirit in respect to foreigners which governs it, but that would be to enter upon too long a digression, this letter being already too long. It is sufficient to say that, with the exception of the rule of international reciprocity in Art. 3437, in respect to capacity to inherit by will or by act of law, in all the rest there is nothing which places foreigners in a position inferior to Mexicans either as to personal or real estate.

It must be borne in mind:

1st. That in conformity with a principle of private international law universally accepted, and especially mentioned in the code, real property is governed by the laws of the place where it is situated, whatever may be the nationality of its possessor or owner. It is not lawful for either foreigner or Mexican to break this rule.

2d. That the civil code does not apply to mines except in those cases when the special mining legislation is silent; neither does it apply to the occupation and alienation of the public lands as to which the legislation is one of the prerogatives of the Federal Congress.

3d. That all rights of foreigners granted by the ordinary, constitutional, or private legislation of the country, are increased or diminished according to the stipulations of treaties between the Republic and the nation to which the foreigner belongs.

4th. That all the above should be understood as referring to the *private* law; but as to the influence which the acquisition and possession of real property may have on the rights and obligations of foreigners in relation to the body politic, reference must be had either to the Constitution of the Republic, to treaties, to the State constitution, or to special laws.

More at length and in other letters, will I communicate to you, Mr. Editor my opinions on these latter points, which are too extensive to be treated of in the present letter, and also concerning the rights of those corporations which are of public utility, or public and private utility jointly, since in this letter reference is only made to individuals and private corporations.

For the present I will sum up my conclusions as follows:

1st. The law of 1842 cannot be considered as in force in the Republic.

2d. That of 1856 also is no longer in force as far as relates to real property situated in the federal district and in Lower California, or in those States which have adopted the civil code of the district, or of which the codes and laws contain provisions similar to those of that code.

From this rule is excepted mining property, which is governed by the law of 1856, in as far as it has not been altered by the codes and special laws of the States and public lands, which are regulated by special federal laws.

3d. Excepting treaty stipulations, foreigners, whether resident or not, may take, hold, transfer, and devise rural and city real property, in the federal district, the territory of Lower California, and those States designated in the previous conclusion, in the same manner as if they were Mexicans, saving only the restrictions on taking by inheritance, established by Art. 3437 of the civil code on the ground of lack of international reciprocity. Private companies and associations of a foreign character enjoy the same rights.

I am, sir, yours respectfully,

LUIS MENDEZ.

NOTES.

1. His conclusions are:

1st. That foreigners may purchase, hold, transfer, make testamentary dispositions of, and inherit lands anywhere in Mexico, equally as well as Mexicans, excepting lands of the public domain.

2d. If they should purchase land here, and should absent themselves for more than two years, they cannot be divested of their property.

3d. That foreigners may purchase in any one Department or State as many estates as they may desire.

2. Law of the XII Tables. Tabula tertia, Caput III. Pothier, in commenting on this text, says: "We are to understand that the meaning of this chapter is that the right to possess was one inherent in Roman citizens only; so that a foreigner, although dwelling in Latinum or the city of Rome itself, could acquire no right to property which had once belonged to a Roman citizen, however long his occupation of the property might have been; and this for the sole reason that he was a foreigner and did not live under the same civil laws."

3 In the United States it is an exclusive attribute of each State, as indeed is the case in the Mexican republic, to legislate upon the rights of foreigners in relation to real estate within its limits.

Kent's Comm., Vol. II, Part IV, 70.

"The legislature of New York, and probably those of many other States, are in the practice of granting to particular aliens, by name, the privilege of holding real property; and by a permanent provision in New York, aliens are enabled to take and hold lands in fee, and to sell, mortgage, and devise, but not demise or lease the same, equally as if they were native citizens; provided the party previously take an oath that he is a resident in the State, and intends always to reside in the United States and to become a citizen thereof as soon as he can be naturalized, and that he has taken the incipient measures required by law for that purpose. The power to sell, assign, mortgage, and devise real estate is to continue for six years from the time of taking the oath; but the alien is not capable of taking or holding any lands descended, devised, or conveyed to him proviously to his becoming such resident and taking the oath above mentioned; and if he dies within the six years, his heirs, being inhabitants of the United States, take by descent equally as if he had been a citizen. There are statute provisions of the same import in favor of aliens in Maryland, South Carolina, Delaware, and Missouri; and in Louisiana, Pennsylvania, Kentucky, Virginia, Michigan, New Jersey, Illinois, Indiana, and Ohio the disability of aliens to take, hold, and transmit real property seems to be essentially removed. In North Carolina and Vermont there is even a provision inserted in their constitutions that every person of good character, who comes into the State and settles, and takes an oath of allegiance to the same, may thereupon purchase, and by other just means acquire, hold, and transfer land, and after one year's residence become entitled to most of the privileges of a natural-born subject. In Connecticut, the superior court is invested with powers at large, upon petition, to grant to resident aliens the right to take, hold, convey, and transmit real estate in like manner as natural citizens."

4 "El Nacional" of July 24, 1883:

5 Sr. Azpiroz thus combats the arguments opposed to his doctrine:

"Art. 162 to 164, Laws of March 11, 1842; Art. 8, January 30, 1854; Art. 5, and December 14, 1874; Art. 1, sec. 1. If the laws allow foreigners to acquire and hold real estate for the sake of the advantage which the State derives from the increase of population and personal services of the proprietors, it does not seem unjust to dispossess them of their real estate, returning to them its value, when by their absence they deprive the republic of the quota of labor, consumption, and strength which it expects in return for this favor. There is, moreover, another reason, that the rents arising from such estates, when spent abroad, are a positive loss to the country."

Doubts have been raised as to whether the 10th article (162 and 163 of this code) of the law of March 11, 1842, was still in force: 1st, because it is not reproduced by that of February 1, 1856; 2d, because it may be considered as opposed to the constitution of 1857; and 3d, because there is no instance of its having been applied in practice; but none of these arguments are admissible.

1st. Because the law of March 11, 1842, having been declared in force in all its parts by that of January 30, 1854, Art. 5, it has not been expressly annulled by any subsequent one. The law of February 1, 1856, contains no provision in opposition to the article in question, and that of December 14, 1874, considers that of 1842 to be in force in as far as it had not been altered by those which followed it.

2d. The constitution of 1857, in the articles 4 and 27, which alone refer to the property of persons, does not include the case of those foreigners who may absent themselves from the country; the 4th guarantees to them the enjoyment of the products of their labor; the 27th only touches upon the rights of individuals in so far as to determine the sole case in which it is lawful to appropriate private property *without the consent* of the owner.

When a foreigner, owner of real estate here, absents himself for the term specified in Art. 8 of the law of 1842, he *voluntarily* ceases to comply with that condition of residence in the republic under which the laws permit him not alone to acquire real estate, but to retain the possession. The constitutional provision which forbids the taking of private property without the consent of the owner does not, therefore, include the case in which a foreigner, by his absence, renounces *voluntarily*, though tacitly, the legal means of preserving his property, which means he assented to when he acquired it under the especial laws in question.

Lastly, the lack of execution of a law may not be alleged as a ground for noncompliance; for absence of precedent is never legitimate ground to go on, nor actual precedent either when it is contrary to the public good (Sala Ilustrac. del Der. Real de España, edic. de 1832, lib. 1, tit. 1, núm. 15 y 16), and in the present case "the law is neither annulled nor altered, except by another subsequent one" (Cod. civ. del Dist. Fed., Art. 8); hence the precedent, whatever it may be, is destroyed as being *contra legem* (Actas, Notas, pág. 293).

6. In a communication from the Department of Public Works of June 1, 1883, to the political and military commander of Lower California, concerning denouncements of mines situated on the islands in the Gulf of Cortez and in the Pacific, it is stated:

"That various mines of ore and quarries of ornamental and building stone have been granted to foreigners for their development, who have since transferred their rights to companies incorporated and situated without the republic; which act is in opposition to the laws of March 14, 1842, December 3, 1855, February 1, 1856, which provide that foreigners can acquire and hold city and rural real estate and mineral claims only when domiciled and resident in the country (*Diario Oficial*, June 7, 1883)."

7. There are a great number of estates in the federal district belonging to foreign families who either have never resided in the country or have retired from it many years ago, leaving their estates in the hands of agents, and the authorities have never claimed the right to seize and sell the property as the law of 1842 prescribes. It is also the constant practice for non-resident foreigners to acquire estates in this country, by means of agents, their rights being respected by the tribunals. I, myself, have administered, for years, estates in this condition, and I have never been interfered with, nor has the full right of my principals to the property ever been denied, judicially or extrajudicially, on the ground of being in opposition to the laws of 1842 and 1856. The same is the case in the rest of the republic; and even on the coast within that five-league zone within which, according to the said laws and the opinion of Sr. Gomez del Palacio, foreigners cannot acquire estates even with the permission of the Executive of the Union, they *do* hold most valuable ones, and enjoy them under the protection of the laws of nations and of persons.

8. See the "History of the Constituent Congress," by Zarco, Vol. 1, pp. 63, 91, 130, *et seq.*

9. In order that I may not be considered as exaggerating, I present the two laws:

LAW OF MARCH 14, 1842.	LAW OF FEBRUARY 1, 1856.
Art. 1. Foreigners domiciled and resident in the republic may take and hold city and country estates, by purchase, ad-	Art. 1. Foreigners domiciled and resident in the republic may take and hold city and country real estate, including

judication, denouncement, or any other title established by law.

Art. 2. They may also acquire property in mines of gold, silver, copper, mercury, iron, and coal, of which they may be discoverers, according to the ordinances of that branch.

Art. 3. No foreigner may acquire more than two rural estates in the same department without permission from the Supreme Government, and only with their present boundaries, and separately.

Art. 4. In regard to the acquisition of estates in cities, towns, and villages, and also of lands adjacent thereto in which it is desired to establish new estates, the lessees will enjoy the preference, the circumstances and conditions being the same.

ART. 5. Foreigners who, by virtue of this law, acquire real property, become, as regards it, entirely subject to the laws in force or to be in force in the republic concerning transference, use, possession, and taxation, without the right to allege rights of alienship on these points.

ART. 6. Consequently, all questions of this nature which may arise, will be determined in the ordinary and regular course of the national laws, to the exclusion of all intervention whatsoever.

ART. 7. Foreigners who acquire city, country or mining property, and foreigners who work on such as servants, artisans or day laborers, are not obliged to serve under arms except as police; but they are obliged to pay the special taxes for the support of the militia.

ART. 8. If a proprietor who is a foreigner shall absent himself with his family for more than two years from the republic, without obtaining permission from the Government, or if the property shall pass by inheritance or any other title into the power of persons not resident in the republic, he will be obliged to sell it within two years reckoned from the day on which the absence or transference of ownership is proved. If he shall not do so, the sale will be conducted *ex officio*, with all legal formalities, and of its products one-tenth will be paid to the denouncer, the other

mines of metals and of coal, whether by purchase, adjudication, denouncement, o whatever other title of ownership established by the ordinary laws or by the Ordinances of Mining.

Art. 2. No foreigner may, without previous permission from the Supreme Government, acquire real estate in the States or Territories of the frontiers, except at a distance of twenty leagues from the frontier.

Art. 3. Foreigners who wish to obtain the permission referred to in the previous article should make application to the Department of Public Works, where it will be considered in connection with the report of the Government of the respective State or Territory, and a suitable decision will be arrived at.

Art. 4. In the acquisition which under this law foreigners may wish to make, of estates in cities, or of lands to establish such estates adjacent to towns, the present tenants and lessees will enjoy the preference, the circumstances and conditions being the same.

ART. 5. Foreigners who, by virtue of this law, acquire real estate, become subject in all relating to it, to whatever may have been or shall be determined in future, in regard to transference, use or possession of the same in the republic, and also in regard to all forms of taxation, without the right to allege at any time the rights of alienship on these points.

ART. 6. Consequently all questions concerning such estates which may arise, will be heard before the tribunals of the republic and according to its laws, to the exclusion of all foreign intervention whatsoever.

ART. 7. Foreigners who acquire city, country or mining property, under this law, are obliged to serve under arms for the protection of property or for the preservation of order in the same town in which they are established. Except these cases, military service is not compulsory on them.

nine-tenths remaining in safe deposit to the order of the owner. In the same manner it will be sold whenever it shall be proved that the owner is residing without the republic and that he who claims to be the proprietor is only acting in place of such absent owner.

Art. 9. These regulations do not include those departments on the frontiers with other nations in respect to which especial laws of colonization will be passed; but no property may ever be acquired in such departments by foreigners, without the express license of the supreme government.

Art. 10. In those departments which are not on the frontier and which have coasts, foreigners may acquire country property only at a distance of five or more leagues from the coast.

Art. 11. In order that foreigners, who acquire real property in the republic, may become citizens of it, it is sufficient that they should prove before the civil authority of the place of their residence that they are property holders, that they have resided two years in the republic, and that they have conducted themselves well. The papers drawn up in this manner will be directed to the proper department, which will issue the certificate of naturalization.

Art. 12. Foreigners may not acquire Government lands in any of the departments of the republic, without contracting for them with the Government, which possesses this right as representative of the ownership of the Mexican Nation.

Art. 8. In order that foreigners who acquire real property in the Republic, may become citizens of it, it is sufficient that they should prove this circumstance before the civil authority of the place of their residence. This circumstance being presented to the ministry of foreign affairs, together with the corresponding petition a certificate of naturalization will be issued.

10. Traité de la publication des effects et de l'application des lois en genéral. Cours du Code Napoléon, cap. IV, num. 128.

See also Delisle "Principes de l'interpretation des Lois." Tom. I., par. 41.

11. Lately the Federal Congress proposed to the legislatures of the several States, as a constitutional reform, that it should be a prerogative of Congress to issue codes on commerce and mining. This reform, *proposed* but not as yet *accepted*, confirms what has just been stated. If it is adopted, mining legislation will be *Federal;* but that relative to other real estate will retain the character of *State* legislation which it now bears.

12. With the exception of the States of Vera Cruz and Mexico which had issued their civil codes before the promulgation of that of the federal district and of Tlaxcala, which preserves the ancient legislation, all the rest have adopted with slight alterations the code of the federal district.

13. Article 3423 of the code may serve as an example, which allows foreigners, who may make wills in the federal district and Lower California, to choose, as to the internal formalities, the law of Mexico or of their own country.

14. This article says: "On account of lack of international reciprocity, those foreigners are incapable of inheriting from inhabitants of the federal district or of Lower California either by will or act of law, whose goods, according to the laws of their country, cannot pass by will or act of law to Mexicans.

15. Civil code, Art. 14.

16. Civil code, Art. 867.

17. Fed. Const., Art. 72, sec. 24; Civil code, Art. 806.

18. Fed. Const., Art. 126.

[From The Two Republics, city of Mexico, August 25, 1883.]

LAND OWNERSHIP.

It will be seen by the able letter which we publish to-day from the pen of the eminent jurist ex-Chief-Justice Vallarta, that he is entirely in accord with the opinion which Governor Gomez Palacio has given on the laws governing the possession of landed property in this country. In brief the ex-chief-justice declares that the laws of 1842, 1854, and 1856 are absolutely valid, and that several other important laws according privileges to foreigners, which no one disputes, rest upon the same basis as the above legal requirements.

The ex-chief-justice, having thus disposed of the main point in question, shows that the validity of these laws is not shaken by the constitution of 1857, which accords certain rights to foreigners, but at the same time imposes certain obligations. Mr. Vallarta demonstrates clearly that the fundamental law did not retrench the power of the National Government to maintain certain safeguards, nor did the constitution contemplate the absurdity of investing foreigners with the same rights as natives, while the former remained in the enjoyment of those advantages and immunities which treaty stipulations grant them. This is in accord with the practice in the United States where aliens enjoy the widest freedom, but are debarred from holding office or voting until after five years probation they have acquired the right of citizenship. The general mining law of the United States even limits the transfer of mineral lands belonging to the Union to "citizens of the United States, and those who have declared their intention to become such," while the Mexican mining laws allow foreigners to own and develop mines on the same terms as native-born citizens.

Judge Hall's assumption that the ownership of land is a matter exclusively of state jurisdiction is swept away by Mr. Vallarta, who shows that the actual and implied powers invested in the National Government are in conflict with that assumption. Here American practice also accords with this interpretation of the Mexican constitution. The power which our President and senate derive from the constitution to make treaties, implies also the power to carry those treaties into effect, whatever state rights may stand in the way.

Having said enough to prove that the laws which are summarised in Mr. Gomez Palacio's statement, printed on another page, are in full force, Mr. Vallarta expresses the desire that they may be revised in a liberal spirit when expedient. He explains that Mexico does not seek to impose citizenship on any one, and expresses the wish that she may continue to hold out the strongest inducements to foreigners to engage in the development of her great resources.

The high standing as a jurist of ex-Chief-Justice Vallarta, whose "expositions of constitutional law" in the supreme court of the republic, Judge Hall declared in a public letter "are of extraordinary authority," and "will constitute a monumental fame more enduring than the ordinary memorials of political and military glory," renders his opinion on all these points conclusive, sustained as it is by that of Governor Gomez Palacio, whose generous sentiments in regard to Americans are well known. As we have said before, the Mexican laws do not in practice prevent foreigners from holding land throughout the broad domain of this great republic. The thousands of foreigners who own lands and factories from the Rio Grande to Tehuantepec can testify to this. It is well, however, that the laws, such as they are, should be known, so that they may be respected while in force and revised if necessary.

FOREIGNERS' RIGHTS.—EX-CHIEF-JUSTICE VALLARTA'S OPINION.—AN ABLE AND INTERESTING DOCUMENT—USEFUL INFORMATION FOR SETTLERS.

Appended is an important letter from ex-Chief-Justice Vallarta on the laws regulating the ownership of land by foreigners. The opinion of Mr. Francisco G. Palacio to which Mr. Vallarta refers was published in the Two Republics on the 7th instant. It is as follows, being reprinted in order that the reference made to it by the ex-chief-justice may be clearly understood. Governor Palacio's opinion is based on the laws of 1842, 1854, 1856, and the federal constitution of 1857:

GOVERNOR PALACIO'S OPINION.

1. Foreigners residing in the Republic of Mexico may acquire all kinds of landed property, including mines of every description, by the same titles that the civil laws establish for Mexican citizens.

2. The exceptions to the rule are—

A. That to acquire land situated twenty leagues or less from any frontier of the republic, a foreigner must obtain the permission of the President.

B. No foreigner can acquire real estate situated within five leagues or less of the coast line of the republic, not even with the President's permission, unless by a special law.

C. No foreigner, born or naturalized in a country bordering on the republic, can acquire public lands by "denouncement," when said lands are situated in a state or territory bordering on it.

3d. A foreigner loses all right to landed property he may have acquired in the republic:

A. By absenting himself with his family from the country for two years without gubernamental permission. Except in the case of mines, which may be retained even in absence.

B. By residing permanently out of the republic, even when the owner leaves a representative or attorney with full rights to act for him. Mines are not included.

C. By transferring the property, by inheritance, sale, or any other title, to any person not residing in the republic. Mines are excepted. In all of these cases the property must be sold and the product of the sale, minus a deduction of 10 per cent., delivered to the former owner.

D. By not maintaining on territory acquired by "denouncements" as public land which in no case must be more than 25,000 hectares (about 2½ acres each) to each "denouncer," one inhabitant for each two hundred hectares of its extension, so that the land may be inhabited at least to that extent for four months in one year.

4. The responsibilities of the acquisition of real estate by foreigners in the Republic of Mexico are:

A. The obligation to subject themselves to the laws in force or which may be enacted respecting the holding, transfer, use, and improvement of property, and submission to the judgments of the Mexican tribunals in everything relating to it.

B. The obligation to pay all lawful taxes on the property.

C. To aid personally and with his means in preserving order and security in the place where he may reside, exclusive, however, of disturbances caused by political revolutions or civil war.

D. The duties of a Mexican citizen, which the foreigner becomes on acquiring real estate, unless he declares beforehand his wish to preserve his nationality.

MR. VALLARTA'S LETTER.

MEXICO, *August* 20, 1883.

MR. J. MASTELLA CLARKE:

MY DEAR SIR: You remit me, with your letter of the 12th instant, the newspapers in which appear the conflicting opinions of Mr. Gomez Palacio and Mr. Hall on the rights of foreigners to acquire real estate in this republic, and you manifest a desire that I would, "in a few words, inform you which of the two opinions is correct, showing the errors in one or the other." With pleasure I comply with your request, inspired with the noble motives you indicate to me, and accordingly express my opinion on this important subject.

Before becoming acquainted with the opinion of Mr. Gomez Palacio I had an opportunity of analyzing the same questions he elucidates, and I obtained results so entirely in consonance with those of that distinguished jurist that with great satisfaction I saw, upon reading El Nacional, which published the article to which I refer, that our opinions were perfectly in accord. In it the author limited himself to examining the subject of which we treat from the standpoint of the special laws which affect it; but it was necessary for me to consider it also in its relations with constitutional rights. To say anything in addition to what Mr. Gomez Palacio has said for the purpose of confirming the truths which he has demonstrated would be temerity. I will limit myself merely to making a few observations which occur to me, which prove, in my opinion, that the prohibition to acquire real estate, which in certain cases our laws impose on foreigners, is not unconstitutional.

The erudite article which Mr. Hall has since published in the Mexican Financier has not altered my former opinion, and, as fully as it may be done in a letter, I will give you the reasons which uphold it. This lawyer maintains that the laws of the 11th of March, 1842, 30th of January, 1854, and 1st of February, 1856, have no force, because neither Santa Ana nor Comonfort, who respectively issued them, had any legal authorization to do so. Without entering into the question of the lawfulness or unlawfulness of the dictatures created by the plans of Tacubaya and Ayutla, because that would cause me to exceed the limits I have imposed upon myself, it will be sufficient for me to say that the criterion by which the country judges of the vigor of its laws, sanctioned by the several dictatures it has suffered, is not that which Mr. Hall establishes, for it is a fact which every one knows that the courts and even the lawmakers themselves consider many of the laws of Santa Ana as still in force, while the liberal administration subsequent to that of Comonfort have never questioned the legitimacy of those issued in the exercise of the powers conferred by the plan of Ayutla.

But Mr. Hall goes even further, for he asserts that if at any time those laws could have been in force, they are nullified now by the constitution, which is the supreme law. I dissent with regret from this view, because, in my opinion, that fundamental law did not give foreigners more rights than Mexicans, nor did it limit the powers of the Government to protect the citizens, even in foreign countries, nor much less deprive the republic of any means of defense which international law sanctions. Many times have I heard Article XXXIII of the constitution interpreted in the sense that foreigners have equal rights with the Mexicans, with whom, under certain circumstances, they are placed on an equality, but in few cases have I seen attention fixed on the final clause of that article, which confers those rights on the condition that the duties of each are alike, including the understanding that the foreigner shall not appeal for any other protection than that which the laws concede to Mexicans. But if a foreigner were to have the same guarantees as a native and at the same time privileges, such as that of diplomatic intervention, for example, the absurdity would follow that the legal position of the foreigner in this country would be better than that of a native, and that the constitution had degraded Mexican citizenship by making it inferior to that of any other country. Notwithstanding that this law is so liberal in regard to foreigners that very few countries can show anything like it, no one should construe its liberal spirit in such a manner as to make it reach the absurdity I have just indicated.

I have affirmed an indisputable fact when I state that very few countries concede to the foreigner the abundance of civil rights he enjoys in Mexico; for in England up to 1870 no foreigner could acquire real estate, and it is not yet lawful in all of the British possessions. In France likewise the right to sue is not accorded to foreigners, unless they provide bonds so onerous that it is often impossible to furnish them, amounting in a manner to a denial of justice. And you are aware that in the American Union itself several States still preserve the old English legislation which prohibits the foreigner from possessing landed property. Of this truth comparative legislation gives testimony. If Mexico could not establish limitations on this point; if she could not uphold international comity, or employ in her own case the right of retaliation, the iniquitous state of things would follow that while Mexicans in their own country accord the foreigner the full right to acquire landed property, and enjoy the same guarantees as themselves, the foreigner in his country could deny Mexicans without remedy or recourse similar rights and guarantees. I cannot comprehend the text of the constitution in a sense that sanctions such monstrous inequality.

If the opinion of Mr. Hall on the unconstitutionality of the laws of 1842, 1854, and 1856 were correct, logic would oblige us to treat in the same way many others whose validity no one up to the present time has questioned. Our very codes, which accept and sanction the principle of reciprocity, would be unconstitutional. As for example Article 1386 of the Civil Code, which puts on an equality Mexican authors with those who reside in other nations, provided such nations make this equality reciprocal; or Article 3473, which prohibits people in the Federal District or Lower California from inheriting by will, or *ab intestato*, property of those who according to the laws of their own country could not bequeath or leave *ab intestato* their property to Mexicans; or Article 495 of the Code of Procedure, which makes an exception in the case when the plaintiff is a foreigner, so that the bond and its form shall be the same as required in this state or nation of citizens of the District and Territory of Lower California. It is impossible that there can be any Mexican lawyer who would judge these provisions unconstitutional, even giving all possible elasticity to Article XXXIII of the constitution, because that would not only outrage the tribunals of justice but also wound national sentiment. Nor need I remark that no country would thus sacrifice the interests of its own citizens who may reside in foreign lands. How then can it be assumed that Mexico would do so?

Beside these considerations, I have others graver still, to dissuade me from interpreting the constitution in the sense I am attacking. It is well known that international law recognizes as the most important and essential of the absolute rights of a nation, as the basis and foundation of the others, all that relates to self-preservation and the right of defense. So that if the law of 1842, which was issued to prevent the consummation of a great national calamity, and from that point of view was no more than the exercise of right, be unconstitutional, the constitution would be responsible not for the blunder but the crime of withholding that right—of taking from Mexico the means of self-preservation which international law accords all states—of sacrificing the national sovereignty on the altar of liberality to give foreigners concessions which no country concedes. I do not think it lawful to interpret any constitution in this sense.

From another point of view does Mr. Hall treat the constitutional question: he denies to the Federal Government the right to make such laws because he affirms that only the States have the right to legislate on the acquisition of property by individuals. I shall add a few words on this point.

It is undeniable that both constitutions, that of Mexico and of the neighboring republic, reserve to the States the full faculty of civil legislation, giving them the right in consequence to determine the manner in which property may be acquired, possessed, held, transferred, or alienated, be it personal or real; but it is incontrovertible also that this authority does not extend so far as to come in conflict with and predominate over the exclusive right which the federal power has to conduct diplomatic relations and deal with international affairs, which may involve the peace or interests of the Union. Thus while in both republics the States have the full right to legislation in penal matters, neither in Mexico nor in the United States have they anything to do with extradition, which is arranged by the federal power. Nor in either country can the States, in case of war, make reprisals nor embargo or confiscate the property of subjects of a hostile power. Nor in time of peace is it lawful for them to establish or deny international reciprocity, to authorize the sale of contraband of war or violate neutrality, &c. If, therefore, State rights have these and other limitations regarding the acquisition or loss of property, it cannot be questioned that they are subject to limitations in matters of greater weight, which relate to the absolute right of defense and preservation which are inherent in nations. If, under the constitution of 1824, the State of Coahuila, legislating on the subject of colonization on the frontier, could issue an inconsiderate decree, which gave rise to the Texan question and brought on the republic the greatest calamities it has suffered since its independence, it must be said to the credit of the constitution of 1857 that it restricted local power on this point and vested such authority solely in the General Government. And, in so far as the United States are concerned, I will merely say that it acquired territory without direct constitutional sanction, and it considers as established doctrine that the power to make treaties implies the power to carry them into effect even by establishing prescriptions which annul the laws of the States relating to the acquisition of property by foreigners.

To quote the text of the constitution on which I found my opinions, to interpret them, and marshal them so as to demonstrate that the law does not admit of the meaning attributed to it, to cite the teachings of writers and publicists who uphold my ideas, would be entirely inopportune in a letter which should have certain limits and even now exceeds the bounds I had imposed on myself. I have, for this reason, limited myself to presenting only certain general considerations concerning the important and grave matters I have touched upon, without going deeply into them—considerations which in my judgment prove that Mexico has exercised a lawful right in issuing the laws of 1842, 1854, and 1856, since her constitution does not disarm her against foreigners; considerations, moreover, which impartially do justice to the republic by reserving for her rights which no sovereign nation can renounce without committing suicide.

If, with sincere regret, I have dissented so far from the opinions of Mr. Hall, a jurist whom I esteem and respect, I have the satisfaction of being entirely in accord with them in the interpretation he gives to section II of Article XXX of the constitution. To assume that that clause forcibly imposes the Mexican nationality on a foreigner who acquires real estate among us, is not only to rebel against international law, as Mr. Hall himself says, but to debase that citizenship so much as to convert it into a veritable penalty. And the spirit of that text, far from imposing penalties, proposes on the contrary, to grant a favor, as is the case with all countries which regard naturalization as a privilege that places foreigners on an equality with native-born citizens. I entirely agree with the opinion that the foreigner who acquires property in Mexico may retain his nationality, and cannot be compelled against his will to become a Mexican citizen.

One word more in conclusion: If it be true, as I believe, that the laws of 1842, 1854, and 1856 are still in full force, that their prescriptions are not anti-constitutional, and that the republic in the matter of acquiring property by foreigners has the right to establish such prohibitions that may appear convenient, within the limit drawn by international law, this does not by any means imply that those laws are, in my judgment, perfect and do not need amendment. Nor do I believe that Mexico should bar her doors to foreigners, thus insulating herself from the civilized world. No; it would be inexact if the contrary were held to be my opinions. According to them, these laws should be reformed, retaining some of their prohibitions; keeping clear, however, of two extremes, which are equally perilous. The one would raise by a prohibitory system a new Chinese wall which would impede the moral and material progress of the country, a policy which semi-barbarous countries, even, do not adopt, while the other course would make such concessions to foreigners as would place them in a better position than the Mexican people, surrendering thereby not only the rights of native-born citizens, but the sovereignty of the republic, a thing which no country does, no matter how liberal it may be considered.

I believe that by the foregoing observations I have complied with the request expressed in your letter, and I conclude with the renewal of my regards.

Yours, &c.,

I. L. VALLARTA.

AFFAIRS AT TUXPAN.

REPORT OF CONSUL LEDET.

The Tuxpan Land Company consists or was formed by certain parties purchasing from the original owners two plantations, one south of the Tuxpan River to the Casones River, some 20 miles; the other running north of Tuxpan River to the Corrall River, also some 20 miles distant; then, with some exceptions, it comprises all the lands bound by the Gulf to the east, some 20 or 25 miles inland.

Notwithstanding all our efforts to get the majority to consent to sell this land, we have never succeeded in so doing, but by owning one share of stock a person can work all the land he wants, graze all the stock, cut all the timber and fire-wood, and other privileges, which gives the emigrant all advantages in coming here poor. His spare time can be devoted to cutting timber, &c., which he can always sell at a fair price; he can raise two crops of corn each year, and every kind of seeds and vegetables grow at their proper season once a year, except the cold climate seeds, as wheat, barley, oats, &c. By going higher in the mountains he can even get a climate for those grains also.

The products, besides cedar, common mahogany, fustic and many other fine furniture and dye woods, are cotton, tobacco, corn, beans, sugar-cane, vanilla beans, castor beans, all kinds of vegetables, bananas, plantains, pine-apples, mangos, grapes, aguacates, mantes, &c., all kinds of fish, salt and fresh water oysters by the millions, shrimps, turtles, &c. Birds of all kinds for eating, deer, rabbits, &c., and plenty of wild hogs, and some few animals that are dangerous.

This is no yellow-fever country, such as is Vera Cruz, nor is it malarious like Tampico. We have fever and ague and other complaints, such as are to be found all over the United States, but though we have a long hot season, the thermometer rarely shows over 90°, and in winter, with very few exceptions, the thermometer rarely indicates lower than 45° or 50°; the heat of the summer is always tempered by our sea breeze, which blows every day, with very few exceptions, and we never suffer from the heat.

The land is full of zapote trees (or a kind of iron wood), which makes the finest railroad ties, and of which thousands upon thousands were sent to Vera Cruz for that road; they are said to last some fifteen to twenty years, and are so heavy as almost to ballast themselves. All these woods will give large freights to the railroad to carry both ways, and, by the company having a few sections or shares, can cut all they want to and cost only labor. Besides that, the lands are productive of many other woods and plants useful in the arts and medicine, besides which there are rich deposits, silver and gold, quicksilver, coal, petroleum, marble, &c.

There are two companies here now sinking wells, and for refining, which, when once in operation, will send enormous quantities of kerosene and lubricating oils to Mexico and elsewhere. These springs are on the Tuxpan lands and on others very near by.

There is a company formed to come out to work the finest fiber plant in the world, and the advance with part of the machinery will be here in a little time; this also will give a large help to the railroad, and the plant is found in enormous quantities on the Tuxpan lands. The town of Tuxpan now contains 8,000 persons; in 1870 there were about 3,000. The town is about nine miles from the mouth of the river by water and seven by land.

The Tuxpan Land Company offers the first railroad that will run directly to Mexico ten shares of stock with its privileges; to give right of way to run through any part of it, of 300 feet width; to cut all the woods necessary for construction of bridges and buildings on its lands, plenty of space for stations and depots, workshops, &c.

Vessels once in the river, and at the city of Tuxpan, where the custom-house is, can come alongside of wharf, discharge, and load in perfect security and without loss of time.

There are over 30,000 bales of cotton brought from New Orleans for the mills in the interior; all this could be raised here and the road get the freight. Each of the plantations, ranches, &c., on the route to Mexico as far as Xico, some 105 miles from here, I think, have offered to give right of way and privileges of cutting woods free for railroad purposes, on the distance through their lands.

The governments of the three States through which the road will run have promised to give their influence to their respective legislatures to press an act to give $500,000 each for Peubla, Hidalgo, and Vera Cruz. If the company would form depots and purchase fine furniture and dye-woods, it would give work to their road, give freight for return to the vessels bringing their stock, and so get freights on stock at much cheaper rate. These are only some few of the advantages offered by Tuxpan.

LIGHTERAGE AND THE TUXPAN BAR.

Vessels arriving at present with cargo for this port, if too large to pass over the bar, must be lightered, thus showing the great necessity of taking such steps as will be necessary that at all seasons of the year vessels of reasonable size may be able to pass it.

The action of the waves, currents, tides, &c., cause the sand to settle at the mouth of the river and vessels cannot get inside. This causes not only delay, but heavy expense in discharge of vessels, and the loading of them afterwards. Vessels of 300 or 400 tons have been detained as long as seventy days in loading, when, had they been able to come at once into the river, they could have been discharged and loaded in a few days. These difficulties existing cause the lighterage to be very expensive, as the lighters may encounter contrary winds and tides in going out or inside the bar. They require to have on board some twelve to fifteen hands, for, when necessary, they put ten to twelve oars to work to get to or from the vessel. When the bar is bad they cannot go out at all; when the water is low they can only take out half loads. Under all these circumstances the launches ask about $2.25 per ton from the anchorage, about 2 or 3 miles from the shore, to Tuxpan Bar, about 9 miles up the river, where the custom-house is located.

While the present state of affairs exists lighters claim this price, but as soon as a vessel can cross the bar the lighterage would cease and only towage would have to be paid, thus showing the importance of keeping open the mouth of the river at all times. At present vessels are detained at Tampico for weeks, while here, if once inside, they could be dispatched in a few days, and a vessel of, say, 400 tons, which would cost some $800 to unload and the same to load again, could be brought in and taken out again for about $500. Once inside, for a very small sum in comparison, the vessel could be towed to head of navigation or to wherever the depot would be, for the laws of the country require that the goods be dispatched at the custom-house, but probably a permit could be obtained from the General Government to land at once at railroad depot. It would be necessary to get this permission from the Government, because the landing at Government wharf and then to load on scows to be carried to railroad depot would be at a considerable cost.

I have sent to New York to get the cost of iron launches of about 60 tons, which will be able to cross the bar, and when these come, and being towed by the steam-tug, the cost would be reduced about one-half. Of course it would be advantageous to charter such vessels of such draught as that they could enter the river over the bar as the deepening of the channel would progress; thus towage would be paid and not lighterage.

At Tampico, where the San Luis Potosi road is commencing, there are a number of vessels (some twenty, I learn) outside unloading, and with several tow-boats, many launches, and facilities, almost all of them are on demurrage from $20 to $40 per day each. I give you all these views to show you how important it is to start from the bar, for there the first work should be done, and as the Government is willing to pay for it only very slowly the company must calculate to advance these funds, and no better employment could be made of that amount of capital.

PORT OF TUXPAN.

As it may be interesting to you to know the superior advantages of Tuxpan over that of Vera Cruz for a most complete and rapid communication with the capital of this republic, I would state that to the east of the mouth of the Tuxpan River there is a reef called the Bajo de Tuxpan, distant about 10 miles; then to the northeast there are two other reefs called the Bajo del Medio and the Bajo de Tanguijo. At the first and last, both about same distance from mouth of river, there is first-rate anchorage for any size vessel; the water at the Bajo del Medio, situated between the other two, is said to be deep. With the other two, there is anchorage for hundreds of vessels, where they can lie protected from all danger, for the reefs are sufficiently large to break off the seas, and vessels can be at easy anchorage.

Further to the north, and distant about some 30 or 40 miles, is seen Lobos Island, where vessels can also lie in safety at all times, protected from the northers which are so fierce on this coast. This is where the United States naval forces and stores were all protected during the war with Mexico when the United States took possession of the whole country, landing troops here and at Tampico, and marching to Vera Cruz and Mexico. The advantages offered by these reefs are, that while in Vera Cruz only steamers can anchor at Sacrificious during a gale, any vessel can anchor under these reefs and Lobos Island, where they can wait in safety until the gale is passed, when (the bar being opened) the tug-boat can bring them inside the river, where the unloading and loading can be carried on securely day and night, if necessary, and permission could be obtained from the Mexican Government. These advantages are so great that if vessels knew of these circumstances, freights would be less, no demurrage paid, and being so little risk, insurance would be less, and while every winter more or less vessels are lost in Vera Cruz, none need be lost here. While this bar could be kept open at so small a cost of $25,000 per year, or an interest of 6 per cent. on $450,000 it will take many millions to make Vera Cruz a good port, and vessels would always be in danger until anchored in the harbor, and even then.

The Government has long been urged to put light-houses on the mouth of the river and on the reefs, which, when they do put them, will give greater safety still, for then vessels could come to anchor at any time, even at night.

A good iron light-house, put up on iron spiles, could be put up for from $5,000 to $10,000 each, and there are four needed to make the harbor complete, when an amount for light-house fees would be estimated on the present commerce of the port. Once a railroad was in operation, many more vessels would come here.

The total exports to the United States in 1874 were about $64,000; in 1879 they amounted to, $225,722; and in 1880 they were $456,525; and for 1881, they were over $600,000.

The population of Tuxpan in 1870 was about 3,000, and now it is over 8,000, as I learn by the last census. The streets are being slowly paved, a fine bridge connects the two parts of town, telegraphic communications to Vera Cruz, Mexico, and Tampico, inland navigation to Tampica at all times via Laguna, Tamiahua, telegraphic and telephone connection with mouth of river, besides a set of signal codes by means of high towers.

The river is navigable for 35 miles from the mouth, and at no great expense, by means of dams, could be made useful much higher; the depth is for any size vessel, with the exception of a few bars, where there are always 9 feet water, and these bars could be easily kept deeper.

COLONIZATION.

A colonization company has been formed who have some 60 square miles of land at nearest boundary, about 40 miles from here, and which is directly on the route of a railroad from Tuxpan to Mexico. This land, like the Tuxpan lands, is not only valuable for its timber, fine woods, mines, fruits, natural and cultivated, but are as good as the Cordova lands for coffee; I think some of the mountains are high enough for wheat, barley, &c., cotton, tobacco, rice, beans, and all other articles necessary for life. But above all, these lands all produce the celebrated vanilla bean, one of the most valuable of the vegetable creation, running up at times, in New York and Paris, as high as $25 and $30 per pound.

Sugar can be raised to supply the United States, cotton almost as fine as the best sea island, all the tropical fruits for exportation. There are inexhaustible fields of fibrous plants, in fact, place a few hundred thousand emigrants in the country in all these lands of Tuxpan, &c., and a half a dozen railroads could not carry the produce to their destination.

There were many Americans came here just after the settlement of the southern question, but the colony was not successful. They were mostly from the South, who were not accustomed to work. The few who remained are doing well, though not getting rich, for want of railroad and other improvements. The greatest drawback was the opposition met with on the part of many, and the difficulties thrown in their way by others. Eveything was taken from them and no assistance given them. This era has now passed away. The establishment of a few American houses opened the eyes of these people, fairer prices given to the producer, production augmented, everything increased. From two or three fifty-ton schooners running here in 1874, we now have the Alexandre line of steamers and a Mexican line running here, the first three times each month. We have now loading a steamer which will carry away 3,000 logs of cedar, besides dyewoods, &c.

The farmer and laborer in the woods are thriving. The lands produce besides the articles named, chewing-gum, India rubber, sarsaparilla, jalap, copal, spice, yellow dyewoods, &c., all of which, from American influence, pay good remunerating prices, and not the old swindling prices paid by Mexican merchants to the poor people. I will merely enumerate a few articles, such as rubber formerly at 10 cents, now at 40 cents; chewing-gum 5 cents, now 11 and 12 cents; sarsaparilla 5 cents now 8 cents; cedar 1½ cents per foot, now 3 and 3½ cents; fustic one half and one-third of a cent per pound, and now it is ¾ cents, and so on with many other things. Hides at $1 each, now 14 cents per pound, &c. Coffee was 5 cents, now it is at 10 cents.

Each season has its produce, but corn produces two crops per year and is worth on an average about 50 cents per bushel. Cotton grows for several years, and only when the staple grows coarse and trees too high needs replanting. Bananas and pine-apples once planted last for years. So with sugar cane.

The fact that revolutions are now over show that the Mexican people have come to their proper senses; they now see the enormous tracts of waste land are useless and pay no taxes; the climate equitable and always mild, are surely evidences that this country should be filled with emigrants to make the land valuable and give work to the railroads. Immigration and railroads should go hand in hand. While a poor emigrant in the United States must hurry and get a house over his head, here he can camp on the ground, and, until his circumstances will permit, can put up a house for nothing, for the woods produce all he wants, the forks of trees for supports, bamboos to form the walls and sides, vines to tie all together, grass and palm for roof; no nails, bolts, hinges, screws, locks, or anything else required, and with mud-plastered walls and with a little whitewash he has a comfortable, even a neat house. For clothing he needs only summer clothes of flannels, no overcoats or wool stockings, in fact none of the most expensive part of the clothing of the cold North. Thus it will be seen that it is *the* country for poor people. A little patch of cane, coffee, corn, beans, vegetables to live on, and all his spare time can be devoted to gathering salable articles that only cost the gathering.

It must be therefore evident that a railroad company should connect with their enterprise that of immigration, for what would our Western railroads be in proportion were it not for the population (immigrants) following in their trails. These immense tracts of land in Mexico must be peopled, and who so interested as the companies, first for their help to build the road and then to furnish material to carry.

The immigrant is entitled to maintenance for one year, to furnish them with implements and house materials, the sales of lands on fair terms, free introduction of all they require in food, clothing, &c. But this is not the most important: vessels if they bring ten families will be exempt from port duties, which are very heavy, and a prize or premium to each family which goes to the company. In some cases for each grown person $50, and children $25, so that here it will be of enormous economy to save port charges on every vessel that brings freight, even if the company has to wait the Government's ability to pay the premiums. Besides, any lands belonging to the nation and taken by the company will get one-third free, and if the company buy private lands the Government pays them back one-third the value.

All these things will show how important it will be to establish emigration bureaus at all points in Europe to bring to United States and then put on vessels bringing materials; for hands are becoming very scarce. From 30 and 50 cents per day labor has gone up to 75 cents and $1. Tampico gets men from here. The men of the colder regions do not like to come to the coast and leave all behind them. The Irish or Germans will do more even at higher wages, and afterwards be good, useful producers.

M. A. LEDET,
Consul.

CONSULATE OF THE UNITED STATES,
Tuxpan, Mexico, June 30, 1883.

Statistics of exportation for port of Tuxpan and list of articles for fiscal year 1880.

Chewing-gum	$27,171 26
Cedar logs	92,385 50
Coffee	15,788 79
Corn	267 52
Deer-skins	792,56
Fustic, or yellow dyewoods	3,775 47
Fruit, bananas, and pineapples	1,274 73
Honey	50,887 06
Hides	16,219 22
Molasses	2,002 82
Mexican silver	1,700 00
Pimento spices	4,601 82
India rubber	28,474 81
Sugar	42,538 29
Sarsaparilla	2,705 11
Vanilla beans	165,991 01
Total	456,525 94

In 1874 the total exports to the United States	$64,000 00
In 1879 the total exports to the United States	225,000 00
In 1880 the total exports to the United States, as above	456,525 94
In 1881 the total exports to the United States	561,004 44
In 1882 the total exports to the United States	607,878 07

This is taken from consular reports, and does not include exports of same articles sent to Europe. While the amount increases so greatly from year to year, the articles exported are always about in same proportion.

OPIUM CONSUMPTION IN CHINA.

REPORT BY CONSUL SEYMOUR, OF CANTON.

OPIUM CONSUMPTION.

An entire steamship's cargo of opium (steamship Canton) having in June last gone from the port of Macao to San Francisco, it is proper to here give the information recently elicited in regard to the effects of opium. In saying "the Chinese waste nothing" I mean they utilize every thing that can be made valuable, and can subsist and thrive on what is wasted by an ordinary citizen of North America; and while enormous quantities of opium are consumed in China the individual cases of distress and destitution arising from its use are so seldom known or mentioned that one is led to believe the consumers are generally able to indulge in what they regard as a luxury. Doubtless many sad cases occur.

Recently (July, 1883) medical reports, issued simultaneously by officials in charge of British hospitals at Hong-Kong and Singapore, treated the subject of opium consumption and its effects, as demonstrated by the experiences of habitual consumers who have come under inspection, while confined in the institutions in charge of the said officials, in connection with military prisons and other restraining establishments of the colonial governments. The concurrent testimony of those two medical officers is unmistakably and unqualifiedly against the prevalent impression as to injurious effects of opium smoking, or smoking opium, and contrary to the testimony of the eminent Dr. John G. Kerr, for the past twenty-nine years in charge of the Medical Missionary Society's Hospital in Canton, at which over 600,000 patients with all kinds of diseases and ailments have received treatment. Having personally interviewed the champions on both sides of this question I am persuaded that their differences are partly due to different nationalities that have come under their observation and treatment, involving hereditary results from generations of victims on one side and sound constitutions and vigorous bodies sustained by generous nutriment on the other side, and partly due to opposite directions of sympathy with nationalities pecuniarily affected by the present traffic in opium. The fact that two very competent and skillful gentlemen who stand so high in their honorable and useful profession as Dr. Kerr, of the Canton Hospital, and Dr. Ayres, colonial surgeon at Hong-Kong, should, with their long and extensive experience in the treatment of opium-smoking patients, be so wide apart in regard to their opinions as to the effects of smoking opium may well command the attention not only of their immediate constituents and communities, but of medical and scientific men throughout the world.

Dr. Ayres stated in his official report very fully, and in connection with tabular classifications, the results of his observations of patients of all classes, for the fiscal year ending June 30, 1883. He says:—

> Table XI gives a list of opium smokers received into the jail, and reporting themselves as consumers of one mace (equal 10 grains) and upwards of opium daily. It gives their age, number of years they have contracted the habit, their consumption of opium per diem, weight on admission and for the four following weeks, if detained so long. None of them were ever permitted to have opium in any form; those who were sick were treated on the merits of their cases, and some were in a terrible condition of disease. There have been no deaths among them, and I have not found any cause of disease among them that could be attributed to their indulgence in the habit of opium smoking.

Of Chinese patients he says:—

> The opium smoker is of all classes. The greatest smokers are men who can afford the expense, and are generally more fat than muscular; but I cannot find that opium smoking causes emaciation in any way.
>
> The heaviest smoker was the fourth on the list, his daily consumption being 15 mace (or 150 grains), he had been an opium smoker for thirty years; he comes into jail weighing 107 pounds, does not lose weight at all, but in three weeks rises to 110 pounds, at the end of the fourth week weighing the same. It appears to me that the opium smoker suffers much less from the inforced deprivation of the accustomed luxury at once than the tobacco smoker. There is certainly no loss of sleep to any extent, for I have had many of them specially watched.
>
> In fact, the great principle of opium, morphia, in smoking, seems to vanish; certainly it in no way affects the smokers. Now I have had opium eaters under my care in jails in India and Assam, and among Khalassic crews on board ships, and if they had been deprived of their opium as the opium smokers have been the consequences would have been serious. I can also speak from personal experience. I have eaten

opium till I could consume half an ounce daily, and I can understand the fascination of that habit, and fully appreciate the difficulty of leaving it off. I have myself smoked three mace (30 grains) of the farmer's prepared opium within an hour without the slightest effect. I have watched other Europeans do the same, as they admitted to their astonishment, with no effect either. I counted their pulses and took their temperature, neither of which were altered by smoking in the slightest degree.

Three mace is equivalent to twelve pipes, and a pipe every five minutes is certainly more than a smoker would get through had he to load for himself.

No opium smoker among the Chinese smokes with the idea of procuring sleep: being naturally tired he may take a pipe or two before going to sleep, but with no intention of helping him to sleep. An opium smoker visits a friend who offers him a pipe, and they lie smoking and chatting between the pipes for hours, just as an European offers wine to a friend. The Chinaman does not expect his visitor to go off to sleep and snore like a hog, any more than the European expects his friend to get drunk and make a beast of himself. That it is costly and expensive as a habit there is no denial, and in order to procure this luxury, unless a well-to-do man, the Chinaman must deprive himself and his family of many comforts and necessaries. * * * A man of the western races who would take to such a habit as opium smoking must be a miserable object. * * * All I can see in it is a waste of time and money.

Such is the testimony of a talented and skillful gentleman whose observation and experience entitle him to speak clearly on this subject. In conversation I found he sustained his statement by conclusive citations of facts. Against that remarkable report on opium smoking, the eminent superintendent of the Canton Hospital, Dr. John G. Kerr, raised objections; while conceding with much courtesy that it emanated from a "scientific man," and that "a dozen other men might give the same opinion and no weight attach to it"; and in reviewing Dr. Ayres' report, Dr. Kerr said:

But, scientifically, are the facts given by Dr. Ayres all that are needed on which to base so sweeping a conclusion? Thousands of men have tried opium smoking in Hongkong, tens of thousands are trying it in China every day. Is all the evidence obtained from these men to be ignored? Will they pronounce the smoking of opium absolutely, "without effect," and "a most harmless practice?"

I have had hundreds of opium smokers under my observation in Canton. Other medical missionaries have had as many or more. All of these agree as to the evil effects, physical, moral, and pecuniary, of opium smoking: but medical missionaries are easily "bamboozled," so we will throw out their testimony as worthless. Still, there are innumerable facts at hand, bearing directly on this point, and until a sufficient number are collected, sifted, and weighed by competent and unprejudiced persons, any conclusions as to the harmlessness of opium smoking, founded on the experience of a few foreigners, is the essence of scientific nonsense.

It is more than probable that Dr. Kerr will, as above intimated, prepare an array of facts on this subject that will command world-wide attention.

CHARLES SEYMOUR,
Consul.

UNITED STATES CONSULATE,
Canton, July 31, 1883.

FOREIGN PATENT MEDICINES AND PHARMACEUTICAL PREPARATIONS IN ITALY.

REPORT BY DEPUTY CONSUL-GENERAL WOOD, OF ROME.

Some three years back the Italian Government, nearly contemporaneously with the Government of France, took into consideration a project of law designed to prohibit the importation of foreign compounded medicines. This was brought about by the pharmaceutical associations and a part of the medical profession having petitioned for a prohibitory law on the ground that the articles in question were quack medicines injurious to health or, at best, if harmless, of no curing properties.

The Government opposed the demand; but the pharmaceutical associations through their legal advisers then raised the question of customs duties, which could not be put aside without serious consideration.

Merchants in the United States know that the duty on imported goods composed of different materials is calculated with discrimination; this is also true of Italy, and upon this point the pharmaceutical associations based their claims, confident of success. Their argument was that the quantity and quality of each chemical of which any given patent medicine is compounded not being known, the customs authority could not with justice to the state and to the importer prescribe what amount of duty to charge.

The law as interpreted by the pharmaceutical associations in their favor actually existed; moreover, their interpretation was founded on practical examples. But to adhere to their wishes was as much as to prohibit the articles, create unpleasant international feeling, and lose a very considerable sum on customs revenue.

Thus the matter remained under consideration for some time, the Government promising to publish a list of such compounds as could be classified in the existing customs tariff.

In the interest of American exporters I have investigated the matter and note the following facts gathered from the Commendatore Casanova, director of the health department at the ministry of the interior.

It appears this long-pending question of whether patent medicines and foreign pharmaceutical compounds shall be allowed to be imported into Italy, and, if so, under what conditions, has at length reached a conclusion.

Speaking with the Commendatore Casanova, I learned that numerous complaints had been advanced by pharmaceutical associations and some of the medical profession against the admission of foreign compounded medicines and pharmaceutical preparations.*

The minister of finance being unwilling to lose the considerable revenue of duty paid on the imports of foreign medicines by prohibiting them, referred the matter to the supreme board of health.

This board being called upon to give an opinion, after months of investigations, reported that a large number of foreign chemical preparations were in constant use in various parts of the kingdom. That while some were greatly esteemed in certain provinces they were in disrepute in others, and *vice versa.* That, as anticipated, the greatest enemies of the imported preparations were the chemists (compounders) themselves, as the interested parties, and also that the same opposition to the importation of medicines existed in France as in Italy. It was then decided that all imported medicines should be examined by the faculty of Turin, the nearest to the custom-house on the French frontier at Modane, through which the most considerable importations are made. This body was also to issue a list of medicines compounded of genuine chemicals not deleterious to health. But the faculty of Turin positively declined the responsibility, and would not make up the list asked for by the supreme board of health.

Under these circumstances the Government decided that the matter should remain *in statu quo*, and the minister of finance has therefore given orders to allow importations to go on as heretofore until further notice.

---

*Distinction should be made between the compounders and the druggists; the pharmaceutical associations are made up of the former, who were the promoters of the proposed prohibitory law, while the druggists as sellers were strongly opposed to it.

In all probability the matter will thus drop. No change in the present tariff may be expected, nor any check in importations. However, Italy may be influenced by the action of France. I learn that France has a project of law now in preparation to provide that all medicines shall bear a certificate that they are compounded of substances accepted by the pharmacopœia in use in the country where they are prepared; that the medicine can not endanger the user, and that each bottle, package, box, &c., shall bear a label distinctly stating what the preparation is good for. It may be here observed that while the latter provision has long been in use among respectable chemists in the United States, it is not true of most European countries. Should this law be enacted in France, Italy may follow with similar provisions; but provided such restrictions be made in Italy, American exporters would need only to prove the character of their compounds in order to be permitted to introduce them into the country.

CHARLES M. WOOD,
Deputy Consul-General.

UNITED STATES CONSULATE-GENERAL,
Rome, September 5, 1883.

THE PHYLLOXERA IN FRANCE.

REPORT BY CONSUL-GENERAL WALKER, OF PARIS.

I have the honor to transmit herewith an article cut from Galignani's Messenger of this date, giving a synopsis of a lecture delivered by M. Cramoisy, member of the Society of Horticulture of France and Officer of Public Instruction, on the phylloxera, and the different means which have been proposed of eradicating it.

GEORGE WALKER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Paris, June 8, 1883.

THE PHYLLOXERA.

[From Galignani's Messenger of June 8, 1883.]

M. Cramoisy, member of the Society of Horticulture of France and Officer of Public Instruction, delivered an interesting lecture at the Salles des Conférences, Boulevard des Capucines, yesterday evening, on the phylloxera, and the different means which have been proposed of eradicating it. After giving a detailed account of the insect and its action on the vine, he proceeded to argue that the sole way of crushing out the pest, which had already extended in France as far north as the Côte-d'Or and Orléans and was attacking the vines in every country of Europe, was, to begin by destroying the male phylloxera, which was always to be found in the condition of a chrysalis, or egg, on the bark of the vine during the winter months. This was all important, though it would be also of advantage to extirpate the female phylloxera, which invariably fastened on the roots, and, by living on the sap or producing lesions of the roots, caused the ultimate death of the plant. M. Cramoisy parenthetically observed that no time should be lost in winning the prize of 300,000 francs offered for the discovery of a method of destroying the phylloxera, as certain competent authorities estimated that, if it were not speedily exterminated, there would practically be no more wine in France at the end of six years from the present time. No less than five thousand receipts had been sent into the Ministry of Agriculture, but the majority were ridiculous or useless. Certain inventive geniuses had gone so far as to recommend the use of extract of the best coffee, absinthe, spirit distilled from old wine, and, to crown all, a decoction of écrevisses, or craw-fish, a remedy which, however inefficient, would undoubtedly raise the price of those succulent shell-fish to prohibitive prices, if carried out to even a partial extent.

There was little reason, however, he apprehended, for fear on the part of our Parisian epicures. On the whole, Dr. Cramoisy said only seven or eight plans were of any real value, comprising planting vines in sandy soils (fatal to the parasites), continuous irrigation, use of certain strong chemicals highly dangerous to the vines themselves, the planting of American vines (whose denser fiber resists the proboscis of the phylloxera)—one of the best suggestions he thought—and the painting of the stems and branches with a preparation of his own. He had accidentally discovered its complete efficacy in killing the *puceron lanigère*, by which his own apple trees had been infested, and gave the following as its composition:

Acide pyroligneux, or wood-vinegar	gram.	1,000
Salicylic acid	do.	2
Red oxide of mercury	do.	1
And fuschine	centigram.	25

This compound was utterly fatal to the male phylloxera, did no injury to the bark of the vine, and could be also used, diluted, to water the roots and destroy the insect preying on them. Dr. Cramoisy further said the price of the compound and the simplicity of its employment and operation constituted additional advantages, and he seemed to anticipate its adoption by the majority of wine-growers at an early date.

ART SCHOOLS IN MUNICH.

REPORT BY CONSUL HARPER.

In communicating the following statements about the present standing of art in Germany, I embrace the opportunity of making a few comparative remarks about art during the fifteenth and sixteenth century, which, to a certain degree, laid the foundation of the present development.

The greatest results in art of every description were attained in the fifteenth and sixteenth century, and I may say that Italy held the foremost rank, especially in painting. In evidence of this, it only needs to mention names like Raphael, Titian, Michael Angelo, and others in comparison, with whom we may, in Germany, name masters like Durer, Holbein, and their contemporaries. The latter were more conventional than their Italian confrères, which may be accounted for by the difference of their native characters and the countries in which they lived.

The southern artists were warmer in their feelings and pictures, and, aided by the Roman Catholic Church, produced mostly paintings of an ecclesiastical character, chiefly destined for the adornment of churches, but since then, to a great extent, handed over to museums and art galleries.

Germany at that time had just passed through the reformation, and its simpleness in general, and especially in the church, reflected itself in the pictures of the artists of the period.

A great factor in the art of the sixteenth century was the production of fine chiseled and enameled works, partly done in raw materials, like copper, brass, and steel, or in metals of higher value, like silver and gold.

The design and execution at that time were wonderful, and just now, when there is a lack in original ideas, it is customary to copy examples of that period without, however, being able to attain the former finish and excellence.

It is difficult to say whether the Italian or German work of that period was superior, but many critics give the precedence to the latter.

The seventeenth century was non-productive of art and the influence of the thirty years' war was already felt.

In the eighteenth century we must turn to France, especially under Louis XVI, where French art, principally decorative art, came to a perfection never dreamed of before.

As painters of the period, I may name Watteau, Bouger, &c., who. although very excellent, rather sacrificed their originality to suit the decorative taste of their noble patrons.

The end of the eighteenth and the beginning of the nineteenth century brought the Revolution and the first French Empire, and there was developed a new impulse in German art which had at that time been dormant for nearly two centuries.

Among the first painting academies we name Weimar, Dresden, Düsseldorf, and it is men like Cornelius, Overbeck, Riedl, &c., we have to thank for their development.

Later on, this trio of cities was joined by Munich, the academy of which was founded under Maximilian I, and well developed under his successor, Ludwig.

Schools of art were also erected at Berlin, Carlsruhe, and Stuttgart, but at the present time Munich has taken the lead among all the German academies of art. Düsseldorf at one time was more important, and although it may still boast of names like Vautier, Achenbach, Sohn, &c., it has lost a great deal since Knauss went to Berlin to assist there men like Werner, Menzel, &c., in their functions as professors of the academy.

Munich is the capital of Bavaria and has a population of 240,000.

Besides the painting academy, it has a large university, possessing some of the finest professors as masters, with the attendance of a large number of students.

There is a polytechnic institute in addition to numerous public schools of higher and lower range to meet the requirements of all.

The present painting academy is on the point of moving into a fine, new, commodious building, where it will be practicable for the different masters to readily oversee the work of their pupils.

The academy being a Government institution is supported by the state, and the fees of the pupils are merely nominal, being the same for foreigners as for natives.

The director of the academy is at present Carl von Piloty, who is well known, both in Europe and the United States, by his numerous and gigantic works. His able supporters are Professors von Defregger and Gabriel Max, of whom we find so many examples in the United States. Defregger paints mostly "genre" in the Tyrolese style, where he was born, and in the truthfulness of his work he is superior to any other living master.

Gabriel Max is well known by the deep thought which is found in his pictures and he is well versed in the study of anatomy. He keeps a museum of his own, which perhaps rivals that of any of German universities.

Of other teachers at the academy we mention Professors Dietz, Seitz, Loeffzs, Lindenschmidt, Wagner, Gysis, &c.

Of other eminent artists who live in Munich, and do not care to undertake the task of teaching, we may name Professors Voltz, F. A. Kaulbach, E. Meisel, A. Braith, Brandt, David Neal, Toby E. Rosenthal, and many others.

The total number of artists living in Munich exceeds 600.

Art treasures like the new and old Pinakothek (the first for modern and the second for old masters), the Glyptothek, and the National Museum account for the choice of Munich as their residence. Those institutions are so excellent and have such capital examples that they are considered the finest in Germany, if not in Europe.

Living is very inexpensive in Munich, which is considered the cheapest of any large city in Germany. An example is not very easy, as the taste and requirements of individuals differ so much; suffice it to say, that one can make a fair dinner, consisting of soup, meat, and vegetables, cheese and bread, and a pint of sound Bavarian beer, in a clean restaurant, for the sum of 1 mark, equal to 25 cents, and other meals in proportion.

The accommodation as regards rooms is also very good; they are, according to the situation, cheaper or dearer, and may be had, furnished or unfurnished, at very cheap rents, with or without board.

I think a single young man could live well at Munich for $500 a year, where he would require in New York at least double the amount for the same living.

For pleasure Munich is a lively city; there are three excellent theaters, which are partly supported by royal and parochial funds. The opera is renowned for its good singers, and for the superior manner in which the operas are produced.

The surroundings of Munich are very inviting; for instance, an hour's railway ride brings one to the beautiful Starnberg Lake, and from there it is only a short distance to the other lake districts and the Bavarian mountains, which give excellent opportunities for pleasant excursions, study, and sketching.

Perhaps it may be of some service to give a hint to persons desiring to purchase works of art in Munich. It will be found better to make their purchases on the spot, as there is a great selection.

If one has not a special knowledge of art, I would recommend him to trust himself to some respectable firm for the purchase of pictures, whose honesty and judgment may be relied upon.

Buying directly from the artist is not usual here. The first-class artists are in constant communication with the dealers and generally sell through them.

Munich is unquestionably the most desirable city in Europe for art students and amateurs.

JOSEPH W. HARPER,
Consul.

UNITED STATES CONSULATE,
Munich, August 31, 1883.

FREE PORTS IN ROUMANIA.

REPORT BY CONSUL-GENERAL SCHUYLER, OF BUCHAREST.

I have the honor to inclose herewith, numbered 1, a translation of a law just passed by the Roumanian Chambers and duly proclaimed, by which the privileges of a free port are suppressed at the towns of Galatz, Braila, and Constanza (Kustendje), and, numbered 2, of another law by which from the 1st April, 1883, bonded warehouses will be opened in those places.

You will observe that the privileges of a free port belonging to the port of Sulina, which is under the control of the European Commission of the Danube, are not mentioned, as had been erroneously telegraphed to certain newspapers for the purpose of exciting feeling against the Roumanian Government.

Those privileges are under the protection of the treaty of Berlin. If the bonded warehouses can be opened at the time fixed, foreign merchants will probably suffer little inconvenience from this law.

Such warehouses will be chiefly necessary for the trade with Bulgaria, which, although increasing, is not very great.

The State will, however, derive an additional revenue from the commerce of these towns.

EUGENE SCHUYLER,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Athens, March 9, 1883.

Translation of law for the suppression of free ports at Galatz, Braila, and Constanza (Kustendje). Passed the Roumanian Chamber February 12 [24], 1883. Passed the Senate February 16 [28], 1883. Signed by the King and promulgated February 17 [March 1], 1883.

ARTICLE I. The privileges of free port, granted by the law of February 15 [29] to the towns of Galatz, Braila, and Constanza, are abrogated. All foreign merchandise and products imported into these towns after the opening of navigation will be subjected to the payment of taxes in conformity with the customs tariff.

ART. II. The minister of finance will take the necessary measures to ascertain the merchandise found in mercantile deposits at the time of the promulgation of this law.

ART. III. All the products and merchandise mentioned in the previous article will be considered as in bond, either for re-exportation free of taxes, or for the payment of only upon being taken from the warehouses.

ART. IV. An administrative regulation will determine all measures with regard to the putting into execution of this law.

Translation of law for the establishment of bonded warehouses in the towns of Braila, Galatz, and Kustendje. Passed the chamber January 17 [29], 1883. Passed the senate January 26 [February 7], 1883. Signed by the King and promulgated the 18th February [2d March], 1883.

ART. I. The minister of finance is authorized to establish a service of bonded warehouses in the towns of Braila, Galatz, and Constanza (Kustendje), commencing April 1, 1883.

ART. II. Until the construction of state buildings, the minister will hire the necessary warehouses to serve as bonded warehouses.

ART. III. Warehouse charges, and all other measures with regard to the putting into execution of this law, will be determined by a public administrative regulation.

ART. IV. The material and staff expenses necessary for the service of the warehouses will be covered by the produce of warehouse taxes and other such revenues.

However, in case of an insufficient production during the present year of the import duties in the towns where bonded warehouses are established, the Government is authorized to open the necessary credits for these expenses.

For the preparatory works necessary for putting the present law into execution, as also for those for the abolition of free ports, an extraordinary credit of 25,000 francs ($5,000) is granted to the Minister of Finance from the fund for special and extraordinary credits for the present year.

TRANSITORY DISPOSITIONS.

ART. V. All merchandise found in the warehouses of retail tradesmen on the promulgation of this law will be exempt from the payment of customs duties.

The Government will take measures to prevent fraud in this respect.

SWISS INDUSTRIES.

REPORTED BY CONSUL BEAUCHAMP, OF ST. GALLE.

I have the honor to inclose herewith a tabulated statement showing the number of people (male and female) employed in the various industries throughout Switzerland for the year 1882.

This table is the first of the kind ever before produced, and has been furnished at considerable time and expense to the State. The compiler of these statistics is Mr. Herman Schlatter, a citizen of Switzerland and the Austrian consul at this place, and to whose kindness I am indebted for the information in advance of the official publication.

This table shows that the total number of people employed in the various industries in Switzerland are 248,137, which embraces 31 industrial pursuits. The industries of *silk* and *cotton*, with their auxiliaries, employ about 148,000 of this number.

EMORY P. BEAUCHAMP,
Consul.

UNITED STATES CONSULATE,
St. Galle, *March* 29, 1883.

Table showing the number of people employed in the various industries in Switzerland during the year 1882.

Cantons.	Silk goods.				Cotton.				Wool.		Linen.		Embroidery.		Knit and woven goods.	Cotton.	
	Gauze embroidery.	Thread.	Ribbons.	Etiquettes, bolting-cloth, &c.	Spinning.	Twist.	Power-weaving.	Hand-weaving.	Spinning.	Weaving.	Spinning.	Weaving.	Machine.	Hand.		Bleaching.	Dyeing.
Zürich	1, 059	3, 940		21, 349	4, 292	361	4, 056	207	76	191	291	133	1, 437		217	678	1, 679
Bern	708	36	331	1, 404	420		294	445	533	463	216	1, 817		50	772	132	197
Luzern	579	121		289	112		40	116	16	63		121	6				16
Uri	19																
Schwyz	150			557	504	10	496					10	65			21	12
Niedwalden	100			18				5		5		5		6			
Obwalden																	
Glarus		70		338	1, 780		2, 171		190	50			193	13	17	71	55
Zug				1, 887	923		227					22					
Freiburg								12	6	9		66					5
Solothurn		432	383		212		49	310	283	87			12		50		
Baselstadt	1, 079	554	5, 872										8				732
Baselland*	1, 659	370	4, 972	12	91			28		40		25	5				
Schaffhausen					86		103		416		44	34	24				6
Appenzell a. R				1, 327		251	121	4, 691				70	4, 396	687		1, 089	17
Appenzell R.						19		136					650	2, 550			
St. Gallen		146		1, 237	1, 797	243	3, 751	3, 185		67		8	20, 355	1, 998	130	723	251
Graubünden					217	8	123		8	10		5	88				5
Aargau	213	915	778	1, 064	3, 185	127	1, 224	1, 254	7	53	46	12	168	160	107	97	293
Thurgau		84	185	520	515		1, 591	680	288	106		250	5, 468	15	373	5	238
Tessin	1, 280				60												
Waadt					6			100	64	81		60		140		61	44
Wallis									11								
Neuenburg								35	10	8				115	190	47	
Genf†																	
Total	6, 846	6, 668	12, 521	30, 002	14, 200	1, 019	14, 246	11, 204	1, 908	1, 233	597	2, 638	32, 875	5, 734	1, 856	2, 924	3, 550

---

* In Basel township but one laborer is estimated to each loom.

† In canton Geneva there is no official count and the estimate is merely approximated.

1882—Continued.

Cantons.	Printing: Silk and cotton.	Straw and hair goods.	Watches.	Jewelry.	Music works.	Iron: Foundries, smelting-furnaces, &c.	Wood-carving.	Paper and cartoon works.	Boot and shoe factories.	Wood: Tile and matches.	Milk: Products.	Glass.	Tobacco.	Rubber: India: Elastics.	Totals.
Zürich	166	1, 014		45		6, 641		757	328	119			42	67	49, 145
Bern	25	56	17, 468	28		1, 682	1, 088	419	31	667	11	61	350		29, 704
Luzern				16		947		250				75	165		2, 932
Uri										41					60
Schwyz						9		400		24		60			2, 318
Niedwalden										13		65			217
Obwalden						5				128					133
Glarus	3, 596					119		94					48		8, 805
Zug		30				212		98		40	295		34		3, 768
Freiburg	8	3, 715	475			142	5	192		17	62	80	44		4, 838
Solothurn			1, 597			1, 085		320	1, 956	35			80	302	7, 193
Baselstadt						509		163					241		9, 158
Baselland *			235			69		30	7	44					7, 587
Schaffhausen			234	76		1, 252		83						15	2, 373
Appenzell a. R	163					35		25		20					12, 892
Appenzell R															3, 355
St. Gallen	268					786		39	93	41			41		35, 159
Graubünden						143		135		25			50		817
Aargau		9, 093			128	884		139	715	80			2, 605	750	24, 097
Thurgau	42					1, 117		22	145	9	56		68		11, 777
Tessin		1, 250	80			35		33					396		3, 134
Waadt		230	1, 803	260	1, 096	1, 316	5	130	314	207	249		1, 087		7, 253
Wallis		59						10		72		122	50		324
Neuenburg		83	14, 525			360		89					44		15, 506
Genf †			2, 950	1, 550	460	428		27		133			44		5, 592
Total	4, 268	15, 530	39, 367	1, 975	1, 684	17, 776	1, 098	3, 455	3, 589	1, 715	673	463	5, 389	1, 134	248, 137

* In Basel township but one laborer is estimated to each loom.

† In canton Geneva there is no official count and the estimate is merely approximated.

AGRICULTURAL PRODUCTION OF RUSSIA.

REPORT BY CONSUL-GENERAL STANTON.

European Russia, exclusive of Finland and lakes, has a superficial area of 4,125,304 square versts, or 429,533,000 desiatines. Of this area almost one-fourth is unproductive. The remaining three-fourths are half forest, half arable land, though but a small portion of this moiety is actually cultivated.

In 1850 the cultivated land in European Russia (Finland and Poland excepted) was estimated as being about 81,322,000 desiatines, or 18 per cent. of the superficial area. Seventy-two millions hereof, or 88.8 per cent., were under grain, and 9,322,000, or 11.2 per cent., under other crops. In 1860 the area of tilled land rose to 88,801,000 desiatines. This increase, 9 per cent., was devoted entirely to cereals, the other crops remaining almost unchanged. In the following decennium (1860–1870) the area of cultivated land, in consequence of the serf emancipation, decreased a little, chiefly in the northern and central governments. In the other Blackearth provinces the area was considerably enlarged at the expense of meadows, forests, and wild land.

On many private estates the area of plowed land was reduced, whilst the peasants plowed up not only their own land but also all that they lease besides. In consequence hereof the total area did not vary much, being in 1870 about 90,158,600 desiatines of plowed land, or an increase of 1½ per cent.

During the next decennium a still further increase of plowed land is noticeable, and at the beginning of the following decennium (1880) the area of tilled land was 99,158,000 desiatines.

The following table shows the distribution of tilled land in the various Russian governments:

Distribution of land according to government groups.	Whole amount of land.	Plowed land.	Number of desiatines of plowed land in 100 desiatines of land.
	Desiatines.	*Desiatines.*	
Northern governments (exclusive of Tundra)	75,939,000	1,187,000	4.5
Northwestern governments	18,888,000	3,275,000	17.3
The governments of the central Volga, and those on its left banks	55,630,000	11,111,000	20.0
The Baltic governments	8,843,000	1,754,000	20.8
The manufacturing governments	23,229,000	7,344,000	31.6
The western governments	27,617,000	11,010,000	39.9
The Vistula governments	11,653,000	5,775,000	47.8
Total in zone without black earth	221,399,000	41,406,000	18.7
The governments of the lower Volga, and those on its left banks	80,841,000	13,592,000	16.8
The southern steppes	36,231,000	9,651,000	26.6
The southwestern governments	15,074,000	7,216,000	41.2
The northern Blackearth strip	27,945,000	18,547,000	66.5
Total in Blackearth zone	175,276,000	58,452,000	33.2
Total European Russia	396,675,000	99,858,000	25.0

The small percentage of cultivated land in the northern governments is explained by the sparse population, the sterile soil, and the great forests. The geographical position of this zone precludes all hope of any considerable future agricultural development. By comparison the northern Blackearth governments posess the largest percentage of cultivated land, two-thirds of all land here being under the plow. In certain individual governments the percentage is still higher. Tula, for instance, has 73 per cent., Kursk and Orel 76 per cent., whilst the broad strip of land from Riasan to Kursk is almost exclusively cultivated land.

Similar conditions prevail in the Vistula and southwestern governments, where all land not necessary for other purposes is under cultivation.

A great increase of the tilled acreage is possible only in the southern steppes and the governments of the lower Volga, where, until now, nomadic agriculture has prevailed and where the population is sparse.

In the northwestern governments of the central Volga, those of its left banks and the industrial and Baltic governments, an increase is only possible by the greatest efforts of land-owners, in consequence of the unproductive character of the soil.

In 1860 the area of meadows and grazing land was about 53,715,600 desiatines, or 12½ per cent. of the total area of cultivated land. Exact data of the relation of meadow to tilled land do not exist, and the proportion in the various governments is very unequal. The most favorable conditions prevail in the southeastern and southern governments, where there are from 1½ to 4 desiatines of grass land to every one of plowed land. Of the northern governments some have one-half desiatine of grass land to one desiatine of tilled land, but the majority have less than one-half and some but one-fifth of a desiatine.

With a very unequal distribution, Russia surpasses most other lands in her wealth of forests. In 1870 the area was estimated at 177,000,000 desiatines, or more than 41 per cent. of the whole territory. In 1860, exclusive of Poland, it was estimated at 180,000,000 desiatines and now at 183,700,000 desiatines, of which 146,461,000 desiatines are productive forests.

Of unproductive land Russia possesses 113,140,000 desiatines, or 26.3 per cent. of its total area, which is very unequally distributed over the various governments. This area is being constantly diminished by the drainage of the morasses, more than 1,000,000 desiatines having been drained during the last few years. The following table shows the nature and percentage of land tenure in European Russia, viz:

	Percentage of whole area.
The Government owns	38.5
The peasants have in usufruct	27.4
Private possessions are	23.0
The Don Cossacks and nomads of Astrachan own	5.6
The department of appanages owns	2.3
The Bashkirs of the eastern governments own	1.8
Cities, monasteries, railways, juridical and other institutions take up	1.4
Total	100.0

The crown is the largest land-owner in Russia, possessing more than one-half of the whole empire, viz, 150,000,000 desiatines, or 34.3 per cent. of the productive and 4.2 of the unproductive land.

These possessions consist of: 1st, 12,300,000 desiatines of forest, or 82 per cent. of the whole; 2d, 3,956,000 desiatines of leased land, or 2.6 per cent.; and 3d, 23,000,000 desiatines of unproductive land, or 14.4 per cent. The largest portion (about 92 per cent.) of the crown forest lands lies in the northern governments. In the central and southern governments there is relatively little woodland, and the crown's possessions here are chiefly leased lands.

Next to the crown the peasants are the largest land owners, possessing more than 120,600,000 desiatines, or 27.4 per cent. of the area of European Russia. This land is divided among 22,827,000 owners, so that the average individual possessions are 5.3 desiatines. The former private serfs have less, the domain serfs generally more than this average. The smallest amount of land per head is owned by the peasants of the southeastern three-crop districts and in the governments of Poltava, Kursk, Tula, Kasan, Moscow, where the average is from 1.97 to 3.5 desiatines per head. The smallness of this share is explained: 1, by the excessive peasant population of those districts; 2, by the fact that the peasants of this zone received at their emancipation but one-fourth of their legally allotted shares; and 3, by the scarcity of domain peasants in these districts, whose shares generally exceed those of the other serfs by 50 per cent. The amount of land owned per head of the population decreases from the frontiers toward the center, *i. e.*, toward Moscow. The possessions of these peasants consist of two-thirds farm and one-third meadow and grass land. But 1 per cent. of peasant land is woodland, and the average per head is from 0.27 to 1.75 desiatine.

The area owned by private individuals is about 100,000,000 desiatines, or 23 per cent. of European Russia, which is divided among 320,000 persons, giving an average of 319 desiatines per head. On the whole the *number* of small proprietors is in excess; thus, 77.6 per cent. have but 100 desiatines, 17.9 per cent. from 100 to 1,000 desiatines, and but 4.9 per cent. have more than 1,000 desiatines. But with reference to the *quantity* and *extent* of land owned the reverse is true. Of the whole amount but 6.5 per cent. is owned by small proprietors, 24.2 per cent. by medium proprietors, whilst 69.3 per cent., or 70,000,000 desiatines, by 15,000 large landed proprietors.

The great landed estates lie chiefly in the eastern part of South Russia, on the eastern and northern frontier, on the southwestern and northwestern frontiers, and in the Baltic provinces. These possessions consist of one-fourth of wood and three-fourths of farm, meadow, grass, and wild land.

As regards the condition of real estate, statistics prove (1) that the large estates are decreasing by subdivision; that (2) medium estates on the contrary are increasing and are more profitable; that (3) small farms are increasing very rapidly; and that (4) titled owners are decreasing both in numbers and the extent of land possessed, whilst the amount of land owned by merchant classes is constantly increasing and at the expense of the nobles' estates.

The different conditions and forms of agriculture prevailing in Russia and its division into certain districts or rayons:

1. The exhaustive system, with two districts lying in the extreme opposite ends of the country, viz, (*a*) the district where forest farming prevails ,(*b*) the so-called exhaustive culture. The former embraces the governments of Archangel, Olonetz, Vologda, and the remote districts of the governments of Novgorod, Kostroma, Viatka, and Perm, and consists in planting the clearings for several years with grain and then leaving the exhausted land to return to its former condition; the latter is found to prevail in fertile and thinly populated districts, and embraces the governments of Ufa, Orenburg, Samara, Astrachan, the Kuban and Don districts, and some parts of Tauria, Kerson, and Yekaterinoslaff, and only differs from the forest farming inasmuch as the fallow land becomes covered with grass instead of forests.

2. The rayon flax culture, which forms the link between forest farming and grain culture. It is carried on partly in clearings and partly in unused fertile land, and embraces the governments of Pleskau, Vitebsk, Novgorod, and in a less degree Iaroslaff, Kostroma, Vologda, Tver, Smolensk, &c.

3. The rayon of cattle-breeding, which is accompanied by the cultivation of timothy, clover, and potatoes, embraces almost the whole of Russia, exclusive of the Blackearth districts.

4. The grain rayon, subdivided into (*a*) the three, and (*b*) the many crop system. The former embraces the governments of Tula Ryason, Tamboff, Pensa, Simbrisk, Nishninesh, Karkoff, Poltava, Kieff, Podolia, Volhynia, &c. Notwithstanding the faults of the three-crop system, this is the most productive portion of Russia. The latter embraces the governments of Saratoff, Samara, Kerson, Poltava, Yekaterinoslaff, and partly Karkoff and Voronesh. The more valuable cereals are planted here.

5. The rayon of beet-root culture, which is found in the governments of Tula, Tamboff, Voronesh, Mohileff, Kensk, Karkoff, Tchernigoff, Kieff, Podolia, and Volhynia.

The agricultural life of Russia was touched to the quick by the serf emancipation. Private landowners passed through a semi-crisis, and were altogether unprepared for what must come. They were too much lacking in money and mental capital for them to cope successfully with such a radical change of conditions.

The great number of redemption receipts prevented their realization; new mortgages could not be obtained; the old long-time loans, with a gradual refunding system, had to be paid at once, on the completion of the redemption of the peasants' lands. The high wages consequent upon the great extension of the railway system withdrew laborers from farm work, who could not well be spared. A permanent fluctuation in the rate of wages ensued. These consequences of the emancipation were felt less on those estates where serfs had formerly paid interest even though irregularly, and on those in the Black-earth zone, whose owners, in consequence of the sparse population, were already used to free labor, and where natural fertility and easy export made up for many other drawbacks. Those without this zone, however, were all the greater sufferers. The free peasant either refused to cultivate the estates or demanded excessive wages. Finally a compromise was affected by the peasants consenting to work the estates for certain specified shares in the crops, which included even the meadows.

Although disadvantageous to the landed proprietors, this system kept the estate agoing and held together peasant and landowner by a certain bond of fellowship. Even those ready to resort at once to free labor, with improved agricultural implements, were not always able to do so, since it was unprofitable, the peasants unreliable, and the method of organizing lacking.

These imperfections were the cause of a resort to piece or day work with money payments, a specified return for a definite amount of work. These systems, although still existing in many parts of the country, are only transitional, since their continuance is inimical to all agricultural development. Latterly, more rational methods have arisen, as also an appreciation of agricultural literature, &c., and the power of reckoning with existing factors.

Since 1863 the fourteen rural banks have greatly contributed to agricultural development by facilitating credit. Latterly this rural credit has been cheaper than formerly, and the said banks have loaned, up to January 1, 1879, 375,682,000 roubles on 35,621 estates.

For the peasants the emancipation was much easier, and was completed without any of the disastrous results which attended the landed proprietor. It gave the peasant the powers of disposing of his labor, and tended to elevate both his labor and his life.

The transfer of private estates to other owners, noticeable after the reform of 1861, still continues, and in increasing degree. In the Blackearth zone, estates are a favorite investment for merchants; less so in other zones, unless for the acquisition of water-power and the erection of factories. In both zones the peasants are constant buyers, and at high prices.

A peculiar characteristic of the reform is the translocation of labor, which arises from the too limited land shares for the growing population, from heavy increased taxation, and from frequent crop failures. Thus arose an extraparochial or wandering industry, which has constantly increased, and often carries off from the village all the adults and half-grown youths, so that only women and incapacitated laborers remain for field work. It is beyond all doubt that the domestic affairs of these wanderers suffer in consequence of this system.

These trades have in part an agricultural character, particularly in the Blackearth districts, whilst in the northern governments—those without Blackearth—particularly in the manufacturing districts, they supply almost all the artisans for building houses, railways, as well as common factory hands.

Some of the Blackearth districts, by reason of thin population, require the presence of these roving laborers. In the spring, leaving the northern and more populous districts of the Blackearth zone, they go southward in small groups, as far as the Siberian frontiers. The greatest part of the field work in the southern and southeastern governments is done by migratory laborers. A part of them remain from spring until autumn, and others only for the grain and hay harvest. The latter are engaged for the crop, by the desiatine, or as day laborers. Since reports, false or true, of great crops, or utter failure, attract and repulse this roving, working contingent, their appearance or absence depends largely on chance, and the individual therefore is exposed to great risks.

Not always does the roving peasant receive money, but often a specified percentage of the crop. Often an artel, or community of laborers, undertake the cultivation of large tracts on such terms. Although seldom, it does happen that the peasant comes with his family, rents land for several years, and often settles there.

GRAIN PRODUCTION.

Russia's cultivated land—99,000,000 desiatines, or 25 per cent. of its area—can, by the relation of its various categories to each other, serve as a measure, as well for the fertility as for the agricultural development of the country. The three-crop system prevails generally throughout the land, the northern portion of the steppes, the Vistula and Baltic governments excepted; 31,000,000 desiatines, or nearly one-third, are fallow land; of the remainder, 64,900,000 desiatines are planted with cereals, 4,000,000 desiatines with other plants.

Average amount of grain sown and its proportionality.

Years.	Number of years.	Grain.		Proportion of both.	Potatoes.	Relation to grain sown.
		Summer.	Winter.			
I.—*In European Russia, exclusive of Poland.*		*Tchetverts.*	*Tchetverts.*	*Per cent.*	*Tchetverts.*	*Per cent.*
1857-1863	7	24, 688, 000	38, 921, 000	39-61	6, 427, 000	10
1870-1879	10	26, 348, 300	40, 615, 500	39. 3-60. 7	8, 548, 000	13
II.—*In the Vistula governments (Poland).*						
1870-1879	10	4, 699, 700		....	3, 823, 300	85
III.—*In European Russia, exclusive of Finland.*						
1870-1879	10	71, 633, 500		....	12, 580, 000	18

These figures show a steady and gradual increase of the amount sown, although large fluctuations appear in the various districts and grain. The following table shows the average of the last decennium.

Average amount sown in the various groups of European Russia from 1870 *to* 1879 *inclusive, in thousands of chetverts.*

	Population.	Wheat.			Rye.	Oats.	Barley.	Buck-wheat.	Other cereals.	Total cereals.	Potatoes.
		Winter.	Summer.	Total.							
DISTRICT WITHOUT BLACKEARTH.											
Northern governments	1,663,496	4.0	19.6	19.6	258.0	402.4	182.2	0.06	0.3	863.0	69.0
Northwestern governments	3,321,669	1.0	7.0	8.8	687.1	1,080.6	150.3	20.6	59.0	2,024.4	329.5
Forest governments of central Volga	7,353,656	2.2	529.9	532.2	3,180.4	3,933.3	781.3	155.0	309.7	8,891.9	420.4
Manufacturing governments	7,906,835	1.9	43.0	44.9	2,615.6	3,609.0	512.2	239.0	145.8	7,166.5	967.6
Western governments	6,768,636	151.0	126.0	277.0	2,340.0	1,542.0	709.0	300.0	212.0	5,380.0	2,272.0
Baltic governments	2,095,377	34.0	18.6	52.7	397.2	346.6	297.3	0.2	69.2	1,163.2	803.3
Vistula governments	6,577,765	503.4	25.8	529.2	1,808.3	1,373.2	536.1	182.5	270.4	4,699.7	3,823.9
Total	35,687,435	694.9	769.0	1,463.9	11,405.5	12,296.2	3,177.9	903.1	1,065.3	30,311.9	8,685.9
BLACKEARTH DISTRICT.											
Southwestern governments	6,223,069	967.4	102.7	1,070.1	1,469.5	1,158.4	605.1	451.0	370.3	5,124.4	864.8
Southern steppe governments	6,245,803	366.9	1,135.8	2,516.0	785.2	415.5	470.4	47.1	637.5	4,871.7	274.7
Northern governments	11,866,713	254.4	157.1	411.5	5,711.3	6,074.2	140.4	1,518.4	478.7	14,343.4	1,737.5
Southern governments	6,351,517	191.0	1,288.5	1,479.5	2,108.0	1,357.8	722.8	481.8	350.0	6,501.4	505.5
Lower Volga governments	10,059,040	10.9	2,189.0	2,199.9	3,632.3	2,805.8	331.3	644.1	837.9	10,450.8	433.0
Total	40,743,142	1,790.5	4,873.2	7,676.9	13,707.1	11,811.3	2,270.0	3,142.4	2,674.0	41,351.6	3,808.4
In European Russia:											
1870	71,798,113	2,424.7	5,335.5	8,709.2	24,132.0	24,016.0	5,234.4	4,084.5	3,751.5	69,987.6	11,078.0
1871	72,780,598	2,825.3	5,389.7	9,210.0	25,281.0	24,066.0	5,408.1	4,285.2	3,857.9	72,108.2	11,507.0
1872	73,783,837	2,655.3	5,677.8	9,288.1	24,708.0	24,334.0	5,504.4	4,150.7	3,760.1	71,741.3	12,405.0
1873	74,802,817	2,264.9	5,835.8	9,014.7	24,657.5	23,755.7	5,473.5	3,745.4	3,737.5	70,384.3	12,902.0
1874	75,838,113	2,400.5	5,615.6	8,955.1	24,858.0	23,890.0	5,507.5	4,107.5	3,723.1	71,131.2	12,480.8
1875	76,889,900	2,441.9	5,543.1	9,189.0	25,447.3	24,001.6	5,450.1	3,904.9	4,073.8	72,066.7	12,350.1
1876	77,958,454	2,472.1	5,622.7	9,092.8	25,340.0	24,097.5	5,588.8	3,885.3	3,630.9	71,680.3	12,545.0
1877	79,044,080	2,383.4	6,095.4	9,409.9	25,638.0	23,958.0	5,500.5	4,239.9	3,493.5	72,330.3	12,571.5
1878	80,147,079	2,440.2	5,590.5	9,121.7	25,030.5	24,255.0	5,271.5	3,929.2	3,607.8	71,224.7	13,305.5
1879	81,270,263	2,545.5	5,715.4	9,267.9	26,016.0	24,701.0	5,470.7	4,117.2	3,769.1	73,350.9	13,845.0
Average	76,430,577	2,485.4	5,627.4	9,140.8	25,172.0	24,107.5	5,440.9	4,045.5	3,740.2	71,088.5	12,500.6
1880	…………	…………	…………	9,801.7	25,786.4	24,803.8		18,166.3		78,557.7	14,728.7

With a variation in the quantity sown as great as 4,000,000 chetverts, there is also one of from 10,000,000 to 12,000,000 chetverts in the amount of grain harvested. This fluctuation depends in a great measure on the crop of the preceding year. After a good crop both the desire and the means are present to increase the amount sown, and *vice versa*. Assuming the average to be 100, the following table shows the fluctuation in the various cereals during the last ten years:

Year.	Wheat.			Rye.	Oats.	Barley.	Buckwheat.	Other cereals.	Total cereals.	Potatoes.
	Winter.	Summer.	Total.							
1870	98	95	96	96	100	96	101	100	97	93
1871	114	96	102	100	100	100	105	103	107	92
1872	107	101	102	98	101	101	103	100	100	99
1873	91	103	98	98	98	101	93	100	97	93
1874	97	99	97	99	99	103	101	100	98	99
1875	98	98	101	101	100	98	97	108	100	98
1876	99	100	98	101	100	102	96	97	99	100
1877	96	108	105	102	100	101	105	94	100	100
1878	98	99	99	99	100	97	97	97	99	106
1879	102	101	102	106	102	101	102	101	103	110
Average	100	100	100	100	100	100	100	100	100	100
1880	103	101	102	103	102	100	99	101	102	115

According to this table only the years 1871 and 1879 show an excess of the average sowings; 1872, 1875, and 1877 reach the average, while the remaining years fall below it, the amount of oats sown being most constant, that of wheat the most fluctuating.

In the zone without Blackearth, with a population of 35,700,000, 30,300,000 chetverts were sown; in the Blackearth zone, with a population of 40,700,000, 41,300,000 chetverts were sown, or in all Russia, with a population of 76,400,000, 71,600,000 chetverts of grain were sown.

In the almost equally populous central governments, with and without Blackearth, the amount sown in each is respectively 18,103,000 and 20,914,000 chetverts. Here, as on the Volga, a little over one chetvert per head is sown. In the northern and western frontier groups and the southern steppes the amount sown is something less than one chetvert per capita. Winter cereals make up 38.5 per cent., summer 61.5 per cent. of the amount sown in European Russia, viz:

Description.	Chetverts.	Relation to total amount sown.			Desiatines sown.
			Per cent.	*Per cent.*	
Rye	25,172,600	Winter cereals, 38.50 per cent.	35.1	....	23,780,000
Wheat, winter	2,485,000		3.4	12.8	2,870,000
Wheat, summer	5,642,200	Summer cereals, 61.50 per cent.	9.4		7,730,000
Oats	24,107,500		33.6	....	12,670,000
Barley	5,456,900		7.6	18.5	5,676,000
Buckwheat	4,045,500		5.7		4,210,000
Other summer cereals	3,740,200		5.2		5,000,000
Total	71,663,500		100	....	62,036,000
Potatoes	12,580,600		17.6	....	2,021,000

Rye takes the first place as well for chetverts as for desiatines, being one-third of the whole amount. Almost as many chetverts of oats are sown but on half the surface. Then comes summer wheat with one-twelfth of all the grain sown and one-eighth of the cultivated surface.

It is the most pretentious and capricious of cereals. Winter wheat, on the contrary, is least sown and on the smallest area. Twice as much barley and buckwheat are sown as winter wheat. Since buckwheat is sown in rye fields, and rye as the chief nourishment of the people occupies nearly all the land devoted to winter cereals, but very little remains, for winter wheat. Pease, maize, &c., occupy but one-twentieth of the area sown. The distribution of the cereals in consequence of soil and climatic conditions is shown in following table. To 100 chetverts of cereals sown there are—

Governments.	Wheat.			Rye.	Oats.	Barley.	Buckwheat.	Other cereals.	Potatoes to 100 chetverts cereals.
	Winter.	Summer.	Total.						
A.—In the zone without Blackearth.									
1. Northern governments	......	2.3	2.3	29.9	46.6	21:1	......	0.1	7.9
2. Northwestern governments	0.1	0.3	0.4	33.9	53.8	7.9	1.0	3.0	16.3
3. Central Volga governments	0.1	5.7	5.8	35.9	44.2	8.8	1.8	3.5	4.7
4. Manufacturing governments	0.03	0.6	0.6	36.5	50.4	7.1	3.3	2.1	13.5
5. Western governments	2.6	2.4	5.1	43.6	28.6	13.1	5.7	3.9	41.9
6. Baltic governments	2.9	1.6	4.5	34.2	39.8	25.6	0.01	5.9	69.1
7. Vistula governments	10.7	0.6	11.3	38.5	29.2	11.4	3.8	5.8	81.3
Total	2.3	2.5	4.9	37.6	40.5	10.5	3.0	3.5	28.6
B.—Blackearth zone.									
8. Southwestern governments	18.9	2.0	21.0	28.7	22.6	11.7	8.8	7.2	16.7
9. Southern steppe governments	7.5	23.3	51.6	16.1	8.5	9.7	1.0	13.1	5.8
10. Northern Blackearth governments	1.8	1.1	3.0	39.8	42.3	1.0	10.6	3.3	12.1
11. Southern Blackearth governments	2.9	19.6	22.5	33.1	20.7	11.1	7.3	5.3	9.1
12. Lower Volga governments	0.1	20.9	21.0	34.8	26.8	3.2	6.2	8.0	4.1
Total	4.3	11.8	18.6	33.3	28.5	5.5	7.6	6.5	9.4
Total in European Russia	3.4	9.4	21.8	35.1	33.6	7.6	5.7	5.2	17.6

This table shows that wheat predominates in the southern steppe governments, being nearly 52 per cent. of the total amount sown, and in certain districts even more. Winter wheat is found from the Baltic provinces to New Russia, and especially on the southwestern frontier, being most sown in the governments of Podolia, Kief, Volhynia, Northern Bessarabia, and Southern Tauria, where it is generally 25 per cent of all the grain sown.

Common winter wheat, *Triticum hybernum*, prevails most in the Blackearth governments; summer wheat more in the southwest. Beginning in Southern Bessarabia, it stretches towards Ufa and Orenburg, taking in a portion of Tauria and Astrachan on the one hand, and on the other the southern portions of the Blackearth governments. In this great district it forms 50 per cent. of the total amount of cereals sown. All Russian summer wheat belongs to varieties of the hard or soft wheat, *Triticum sativum*, *æstivum*, and *turgidum*.

Rye, *Secale cereale*, the chief bread cereal of Russia, is cultivated everywhere in nearly equal proportion, the steppe excepted, where wheat predominates, and the high north, where barley displaces it.

Oats (high northern latitudes excepted) is cultivated throughout Russia, and there is scarcely a district where none are cultivated. The predominance thereof testifies to impoverished fields, bad farming, few cattle, and a prevalency of horses. Two sorts are generally cultivated in Russia, *Avena sativa* and *Avena orientales*.

In contrast to oats, the quantity of barley sown in the central governments is small, being limited to the frontier provinces. The most is sown in the government of Archangel, the northern parts of Olonets, Vologda, Viatka, and Perm. In the south of Bessarabia, Tauria, Yekaterinoslaff, Poltova, and Charkoff much barley is also sown. Barley is a very important cereal, being in the high north about the only one which thrives, in the western parts the mainstay of the brewers, and in the south it replaces oats and serves as much for fodder as for food.

Buckwheat is chiefly grown in the central governments throughout Russia. In the northern Blackearth, and southern, non-Blackearth, zones it is almost three-fourths of all grain sown.

The other summer cereals attain their greatest percentage in the southern steppes and western district, generally, where a fruitful soil is combined with a high system of agriculture. Potatoes are found in the greater portion of Russia lying west of Moscow, their predominance increasing with the westward progress.

In the Blackearth governments few potatoes are planted, and scarcely any in the steppes in the eastern and greatest portion of the northern governments. The crop failures of the last few years have, however, forced the peasants to pay more attention to the culture of potatoes and to the improvement of the system of agriculture generally.

The various reports received by the department of agriculture for 1881 show clearly how greatly agriculture is being developed in certain districts of the empire, and is endeavoring to accommodate itself to existing conditions. The chief reasons why a change in the system of sowing was necessary are (1) the disproportional increase in the price of rye; (2) the unusual increase in the number of harmful insects, such as the *Anisoplia austriaca*, *Cephus pygmæses*, and the *Cecydomia destructor;* and (3) the dearth of fodder in consequence of the plowing up of the fields and meadows. Besides which, many districts suffered from an exhaustion of the soil consequent upon a long cultivation of one and the same cereal and the slight demand for agricultural products.

The increase of the price of rye induced an increased culture wherever it was possible, and led to a resort to other cereals, chiefly maize and potatoes, for distilling purposes instead of rye. Another result of the high rye prices was a more general resort to the three-crop system. The presence of injurious insects caused a decrease of the summer cereals, particularly wheat, winter rye and wheat, maize, and oil seed taking its place. The devastations of the Hessian fly in certain northern districts caused rye to be sown instead of wheat, and finally the lack of fodder caused more attention to be paid to the cultivation of plants and grasses adapted to this purpose.

GRAIN CROPS FROM 1870 TO 1879.

The average total crop of European Russia (exclusive of the Vistula governments) for the decennium was 269,199,900 chetverts of grain, and 59,389,200 chetverts of potatoes. The Vistula governments yielded for the same period 21,363,100 chetverts grain and 11,663,400 chetverts potatoes. Compared with 1850 the crop in European Russia (exclusive of Poland) increased 28,147,000 chetverts of grain, and 15,516,000 chetverts of potatoes. This is to be ascribed not only to an increased cultivation, but also to a greater productivity per district sown, which rose from 3.4 to 3.7.

The largest crops were in 1870 and 1878, the smallest in 1871 and 1875. The largest crops of rye and wheat fell in other years.

EXTENT OF CROPS.

Per chetverts sown there were chetverts harvested:

	Wheat.			Rye.	Oats.	Barley.	Buckwheat.	Other cereals.	Total cereals.	Potatoes.
	Winter.	Summer.	Total.							
In the district without Blackearth	4.7	3.2	3.9	3.2	3.2	3.7	3.3	3.4	3.4	4.6
In the Blackearth district	4.3	3.2	3.5	4.5	3.7	3.8	3.4	4.4	4.0	4.9
In European Russia:										
1870	4.6	4.3	4.5	4.4	4.2	4.1	4.3	4.8	4.3	4.3
1871	4.0	3.2	3.5	3.9	2.7	3.3	2.5	3.4	3.3	3.9
1872	3.5	2.8	3.0	3.8	3.7	3.8	3.6	3.8	3.6	5.2
1873	4.6	2.3	3.0	4.3	3.4	3.7	3.8	3.4	3.7	4.4
1874	5.5	4.3	4.8	4.9	3.4	3.7	2.8	4.2	4.4	4.6
1875	3.0	2.8	2.7	3.7	2.9	2.7	2.8	3.3	3.1	4.8
1876	3.8	2.7	2.9	3.6	3.6	3.9	3.9	4.4	3.6	5.2
1877	5.1	4.1	4.5	4.1	3.5	4.2	3.4	4.7	4.0	5.1
1878	5.5	3.2	3.6	4.9	3.8	4.0	3.9	4.6	4.2	5.0
1879	4.1	2.6	3.1	3.6	3.6	3.8	3.0	4.3	3.7	4.2
Average	4.4	3.2	3.5	4.1	3.5	3.7	3.4	4.1	3.7	4.7
1880	......	......	2.9	3.4	3.4	3.9			3.4	5.7

Grain crops in European Russia from 1870–1879, *according to government groups.*

[In thousands of chetverts.]

	Wheat.			Rye.	Oats.	Barley.	Buck-wheat.	Other cereals.	Total cereals.	Potatoes.	Total grain, exclusive of seed.
	Winter.	Summer.	Total.								
DISTRICT WITHOUT BLACK EARTH.											
Northern governments	....	62. 1	62. 0	1, 010. 0	1, 265. 0	594. 7	0. 11	1. 2	2, 933. 6	264. 1	2, 070. 6
Northwestern governments	6. 3	22. 7	29. 0	2, 557. 0	3, 139. 5	547. 3	65. 0	185. 2	6, 521. 0	1, 505. 5	4, 496. 6
Central Upper Volga governments	6. 2	1, 553. 4	1, 559. 6	11, 114. 9	12, 427. 2	2, 576. 4	513. 2	866. 0	29, 057. 4	1, 798. 5	20, 157. 5
Manufacturing governments	5. 8	114. 3	120. 1	7, 286. 9	9, 048. 5	1, 511. 4	592. 3	417. 3	18, 976. 3	3, 770. 1	11, 809. 8
Western governments	560. 0	456. 0	1, 016. 0	8, 652. 0	5, 344. 0	2, 537. 0	1, 055. 0	711. 0	19, 315. 0	8, 982. 0	13, 920. 0
Baltic governments	186. 3	100. 6	288. 0	2, 209. 4	1, 576. 2	1, 633. 4	0. 9	216. 8	5, 965. 0	3, 608. 4	4, 761. 8
Vistula governments	2, 509. 1	125. 3	2, 634. 4	8, 174. 8	6, 201. 1	2, 397. 4	748. 5	1, 206. 9	21, 363. 1	20, 254. 6	16, 663. 4
Total	3, 277. 8	2, 431. 0	5, 708. 8	41, 004. 8	39, 001. 7	11, 798. 3	2, 972. 9	3, 604. 8	104, 091. 3	40, 183. 0	73, 779. 4
BLACKEARTH DISTRICT.											
Southwestern governments	4, 143. 4	376. 0	4, 519. 4	6, 154. 0	4, 977. 2	2, 336. 2	1, 768. 8	1, 548. 1	21, 303. 7	3, 745. 0	16, 179. 3
Southern steppe governments	1, 304. 4	3, 704. 1	8, 317. 5	2, 870. 9	1, 707. 7	1, 979. 9	150. 7	3, 198. 0	18, 224. 7	1, 233. 7	13, 353. 0
Northern governments	1, 435. 4	635. 4	2, 070. 8	27, 314. 3	23, 047. 3	544. 1	5, 095. 3	2, 324. 7	60, 396. 5	9, 167. 7	46, 053. 1
Southern governments	727. 7	3, 663. 2	4, 390. 9	9, 691. 3	5, 428. 8	2, 384. 1	1, 582. 6	1, 521. 7	24, 999. 4	3, 026. 3	18, 438. 0
Lower Volga governments	32. 7	7, 498. 5	7, 527. 9	16, 323. 9	9, 767, 1	1, 182. 8	2, 167. 2	3, 188. 4	40, 157. 3	2, 034. 5	29, 706. 5
Total	7, 640. 3	15, 788. 1	26, 853. 5	62, 354. 4	44, 928. 1	8, 427. 1	10, 764. 6	11, 780. 9	165, 108. 6	19, 206. 2	123, 757. 0
In European Russia:											
1870	11, 140. 6	23, 130. 6	39, 123. 2	105, 104. 0	99, 898. 0	21, 552. 0	17, 639. 0	18, 049. 6	301, 365. 8	55, 602. 0	231, 378. 2
1871	12, 017. 1	17, 105. 6	32, 434. 7	97, 977. 0	66, 091. 0	17, 909. 0	10, 882. 5	13, 068. 0	238, 362. 2	45, 191. 0	166, 194. 0
1872	9, 375. 4	15, 804. 9	27, 461. 3	93. 924. 0	90, 185. 0	20, 847. 0	14, 877. 2	14, 071. 2	261, 365. 7	64, 222. 0	189, 624. 4
1873	10, 480. 9	13, 750. 7	26, 968. 6	105, 386. 0	79, 995. 6	20, 180. 0	14, 271. 7	13, 961. 0	260, 762. 3	57, 302. 0	190, 378. 0
1874	13, 223. 3	24, 205. 9	43, 873. 2	120, 807. 0	80, 326. 0	19, 667. 0	11, 559. 0	15, 972. 2	291, 024. 4	57, 120. 0	219, 893. 2
1875	7, 353. 5	15, 246. 2	25, 151. 7	93, 812. 0	68, 548. 0	15, 041. 0	10, 990. 7	13, 591. 5	227, 134. 9	58, 948. 0	155, 068. 2
1876	9, 530. 6	15, 060. 1	26, 637. 7	90, 045. 0	87, 532. 0	21, 981. 0	15, 340. 8	16, 248. 7	257, 785. 2	65, 886. 0	186, 134. 9
1877	12, 261. 0	24, 840. 7	42, 739. 7	107, 973. 0	84, 903. 0	23, 070. 0	14, 497. 9	16, 398. 7	289, 582. 3	64, 677. 0	217, 252. 0
1878	13, 439. 2	18, 031. 7	33, 457. 9	122, 482. 0	92, 697. 0	21, 115. 0	15, 151. 7	16, 477. 7	301, 381. 3	66, 612. 0	230, 156. 6
1879	10, 360. 1	15, 004. 9	28, 776. 0	96, 082. 0	89, 123. 0	20, 888. 0	12, 165. 2	16, 201. 4	263. 235. 6	58, 332. 0	189, 284. 7
Average	10, 918. 2	18, 219. 1	32, 562. 3	103, 359. 2	83, 929. 0	20, 225. 0	13, 737. 5	15, 385. 7	269, 199. 9	59, 389. 2	197, 536. 4
1880	....	....	27, 480. 8	86, 976. 6	84, 678. 9	51, 338. 6			250, 475. 0	66, 955. 4	177, 417. 3

The difference in the yield of individual years as compared with the average crop is shown in the following table:

Years.	Wheat.			Rye.	Oats.	Buckwheat.	Barley.	Other cereals.	Total.	Total, exclusive seed.	Potatoes.
	Winter.	Summer.	Total.								
1870	102	127	120	102	119	128	106	117	112	117	94
1871	110	93	99	94	80	79	89	85	89	84	87
1872	86	87	84	91	107	108	103	92	97	96	108
1873	96	75	83	102	95	104	99	90	97	96	95
1874	122	133	132	116	96	84	97	103	108	111	97
1875	67	84	77	91	82	80	74	88	84	79	99
1876	87	83	82	87	104	112	109	106	96	94	111
1877	112	136	132	105	101	106	114	107	107	110	109
1878	123	99	102	119	110	119	105	107	112	117	112
1879	95	83	89	93	106	89	104	105	98	96	98
Average	100	100	100	100	100	100	100	100	100	100	100
1880	85	83	84	84	101	100	104	104	90	90	112

The fluctuations in the yield are greater than in the sowings, which is due to the variations of the conditions governing the harvest. It is worthy of remark that the more valuable the grain the more uncertain the crop. Wheat, for instance, in the eleven years given in the foregoing table was eight years below the average. Winter wheat and rye are more sure, and among these varieties good and bad crops are so equally divided that they may be said to alternate.

The regularity of the change in the yield of good and bad years is clearly show in the following table:

Fluctuations in grain and potato crops in European Russia.

Years.	Wheat.			Rye.	Oats.	Barley.	Buckwheat.	Other cereals.	Total cereals.	Potatoes.
	Winter.	Summer.	Total.							
1870	106	133	126	107	121	110	126	117	114	102
1871	91	99	99	95	78	89	74	83	88	83
1872	81	87	84	92	106	102	106	93	96	110
1873	106	71	84	104	98	100	112	83	98	93
1874	126	133	135	119	98	100	82	108	109	97
1875	68	87	76	90	83	73	82	81	82	102
1876	86	84	82	87	103	104	115	108	95	110
1877	116	127	126	100	101	113	100	115	107	108
1878	126	99	101	119	109	107	115	112	113	106
1879	94	80	87	87	103	102	88	105	98	89
Average	100	100	100	100	100	100	100	100	100	100
1880	......	......	82	82	97	95			91	12

Rye and wheat, especially winter wheat, show a pretty regular succession of two good and two bad crops. Oats, barley, and other summer cereals show a greater regularity of the crop, there being six above to four below the average. Potatoes have seven good to four bad crops. During the twenty-six years from 1855 to 1880 the smallest crops were harvested in the years 1859, 1865, 1867, 1871, 1875, 1879, and 1880, the worst year being 1879. The best years were, especially for cereals, 1860, 1863, and 1870, the latter surpassing all others with a crop of 301,744,000 chetverts.

The following data are appended for the sake of comparison:

Average yield of grain in the leading countries of the world.

[In millions of chetverts.]

Name of country.	Wheat.	Rye.	Barley.	Oats.	Other cereals.	Potatoes.
I.—*European countries.*						
European Russia	32.6	103.4	20.2	83.9	29.1	59.4
Germany	59.4	44.4	17.8	53.5	4.9	136.0
France	52.1	13.2	10.1	35.2	15.0	65.3
Austria and Hungary	15.9	20.1	13.2	21.2	14.8	50.2
Great Britain	24.5	0.3	16.5	31.0	....	37.7
Italy	25.9	2.4	2.4	3.7	18.4	4.0
Spain	30.6	5.8	13.9	2.3	6.6	1.1
Danubian Principalities	14.4	3.2	6.8	1.0	12.6	......
Denmark	0.7	2.4	3.5	4.9	0.6	2.6
Sweden	0.6	3.4	2.5	7.4	0.9	9.3
Belgium	4.1	3.0	0.8	3.9	....	13.1
Holland	1.0	1.8	0.8	2.1	4.2	8.9
Portugal	1.5	1.2	0.3	0.2	....	1.5
Norway	0.05	0.2	0.8	1.6	0.4	3.7
Greece	0.8	....	0.3	....	0.8	......
Total Europe	214.3	204.5	109.7	265.5	107.9	305.7
II.—*Non-European countries*						
United States	58.3	3.4	6.0	55.8	214.2	27.1
British India	50.0	....	....	....	....	......
Canada	3.1	0.2	2.1	8.3	1.2	......
Australia	3.8	....	0.3	1.6	0.9	......
Egypt	2.8	....	2.0	....	4.2	......
Chili	1.9	....	0.6	....	....	......
Algiers	4.5	....	8.3	0.3	0.6	......
Japan	2.0	....	9.0	....	6.0	......
Total	136.3	3.6	28.2	65.9	228.3	27.1
Grand total	340.1	213.5	139.2	328.1	331.2	421.0

RUSSIA'S GRAIN EXPORT.

The export trade was worst in 1855, in which year but 803,000 chetverts were exported. It is hardly just to consider this year, as it was the year of the Crimean war, and all ports were blockaded, and the annual export of the preceding decennium was from 3,500,000 to 11,500,000 of chetverts.

In 1856, after the peace, the exports rose to 7,500,000 chetverts, annually increased, and reached, in 1860, 9,500,000.

The first year after the serf emancipation the export fell (1862) to 7,744,000 chetverts; in 1863, to 7,045,000 chetverts. It then increased, until, in 1867, it reached the amount of 12,500,000 chetverts. With the decennium, commencing in 1870, begins a new era in the grain export trade. Toward the close of 1869 the export reached the hitherto unknown figures of 21,173,000 chetverts; in 1871 it was 23,387,000 chetverts, the export of winter wheat alone being greater than the total export of 1866. In 1877 it was 30,580,000, and in 1878 41,815,000 chetverts.

In order to form an opinion of the constant progress of the export trade (notwithstanding occasional temporary retrogressions), during the last twenty-five years, it is advisable to divide the twenty-five years into lustra, and then compare the resulting average with the export of the preceding twenty-five years (1830–1854), which in the following table is given as 100.

AVERAGE ANNUAL GRAIN EXPORT.

From 1830 to 1854,	3,918,000 chetverts,	or 100 per cent.
From 1855 to 1859,	7,072,000 chetverts,	or 181 per cent.
From 1860 to 1864,	8,778,000 chetverts,	or 224 per cent.
From 1865 to 1869,	10,085,000 chetverts,	or 257 per cent.
From 1870 to 1874,	21,606,000 chetverts,	or 551 per cent.
From 1874 to 1875,	33,221,000 chetverts,	or 848 per cent.

The average for the twenty-five years was 16,172,000 chetverts, or four times as much as that of the preceding twenty-five years. The different varieties participate as follows:

Years.	Wheat.	Rye.	Oats.	Other cereals and flour.	Total grain.
1870	9, 649, 728	3, 042, 096	4, 173, 307	4, 198, 571	21, 063, 702
1871	11, 526, 404	3, 900, 722	4, 742, 788	3, 062, 367	23, 232, 281
1872	9, 847, 839	2, 728, 361	1, 396, 868	1, 975, 115	15, 948, 183
1873	6, 951, 164	7, 389, 182	3, 437, 940	2, 919, 850	20, 704, 136
1874	8, 225, 358	9, 768, 479	5, 373, 027	3, 542, 870	26, 849, 739
1875	9, 528, 583	5, 701, 971	4, 900, 119	2, 311, 012	22, 441, 685
1876	9, 236, 518	5, 071, 433	5, 230, 088	2, 865, 241	25, 403, 280
1877	8, 658, 261	9, 997, 397	7, 621, 099	4, 302, 959	30, 579, 716
1878	17, 256, 974	10, 010, 955	7, 629, 706	6, 917, 553	41, 815, 188
1879	13, 920, 609	12, 020, 222	7, 795, 158	5, 993, 406	39, 729, 395
Average	10, 481, 641	7, 257, 087	5, 230, 012	3, 914, 520	26, 883, 259
1880	6, 139, 297	5, 267, 444	7, 196, 339	4, 527, 907	23, 830, 987

Wheat is most exported; rye comes next. These two cereals form two-thirds of the total grain export.

As already mentioned, a part of the grain and potatoes is used by the distilleries and for the manufacture of starch, sirup, &c. The average annual consumption of the distilleries during the last ten years was 6,925,000 chetverts grain, and 3,489,000 chetverts potatoes, or 10 per cent. more than in the preceding decennium. The following table gives the particulars of this consumption:

Years.	Grain.	Potatoes.	Total.
	Chetverts.	*Chetverts.*	*Chetverts.*
1870	5, 674, 421	3, 421, 958	9, 096, 379
1871	7, 851, 067	2, 177, 286	10, 028, 353
1872	7, 497, 010	3, 976, 599	11, 473, 609
1873	6, 827, 635	3, 696, 918	10, 524, 553
1874	7, 355, 350	3, 592, 727	10, 948, 077
1875	7, 699, 098	3, 151, 611	11, 850, 709
1876	5, 446, 171	3, 638, 494	9, 064, 665
1877	6, 147, 376	3, 616, 669	9, 764, 045
1878	7, 907, 229	3, 074, 266	10, 981, 495
1879	6, 849, 405	3, 494, 480	10, 343, 885
Average	6, 925, 476	3, 482, 601	10, 407, 077

Comparing these figures with those of the respective crops, it becomes manifest that the distillery consumption and the crops are closely connected. After the good harvest of 1870, 2,000,000 more chetverts were consumed in 1871, and as much less in 1876, after the crop failure of

1875. The same is true of the potato crop; the larger the crop the greater the consumption by the distilleries.

Deducting from the annual harvest the export and distillery consumption, there remains for the nourishment of the people:

Years.	Net amount of grain yield, less that exported and distilled.	Net amount of potato crop, less those used in distilleries.	Per capita.	
			Grain.	Potatoes.
1870	205, 017, 877	40, 675, 042	2. 8	0. 5
1871	135, 593, 645	30, 991, 714	1. 8	0. 4
1872	167, 534, 807	47, 863, 401	2. 3	0. 6
1873	163, 740, 513	41, 379, 082	2. 2	0. 5
1874	185, 410, 921	41, 087, 273	2. 4	0. 5
1875	126, 104, 213	43, 343, 389	1. 6	0. 5
1876	156, 441, 549	49, 587, 504	2. 0	0. 6
1877	180, 271, 908	48, 411, 331	2. 2	0. 6
1878	179, 465, 583	51, 039, 734	2. 2	0. 6
1879	143, 421, 200	40, 841, 520	1. 8	0. 5
Average	163, 787, 662	48, 021, 999	2. 1	0. 5

The result, 2.1 chetverts grains (inclusive of oats), and one-half chetverts potatoes per head, is insufficient; the grain minimum reduced to rye (exclusive of oats, which is 0.60 chetvert), is 1.75. Deducting the oats, 0.6, from the foregoing 2.10, but 1.50 chetverts remain as the average of nutriment, or 0.25 chetvert too little, which, calculated for the whole population, makes 14.3 per cent. of the whole consumption of cereals, or 23,000,000 chetverts.

If the distribution of the net grain yield of the individual zones and districts in Russia be considered, three groups of a very different character are formed: One with a constant, often excessive, surplus; one with a constant deficit in proportion to its population, and one whose average yield suffices for the wants of its inhabitants and occasionally in good years produces a surplus.

To the first group, with a surplus, belong thirty-five governments, of which ten comprise the whole center of the Black-earth zone; two of the southwestern (Kief and Podolia); a large portion of the southern steppes (Kerson, Tauria, Don Cossack Land); the whole eastern parts and those lying on the Volga (Astrachan and Ufa excepted); the Baltic and the greater portion of the Vistula provinces; two western (Wilna and Kovno) and some of the central governments, without Blackearth.

To the second group, whose yield only suffices for local wants, belong eight governments, viz, Yaroslaff, Kostroma, Smolensk, Mohileff, Warsaw, Kieltze, Volhynia, and Ufa.

To the third group belong seventeen governments, which on the average during the past ten years have not yielded their inhabitants sufficient grain, viz, three northern governments, six without Blackearth (Moscow, Tver, Vladimir, Kaluga, Novgorod, and St. Petersburg), three western (Grodno, Vitebsk, Minsk), two Vistula (Siedletz and Petukoff), two southern steppes, (Bessarabia and Yekaterinoslaff), and one eastern government (Orenburg).

Groups.	No. of governments.	Population.	Net yield of crops including oats.	Per capita.
			Chetverts.	
Group I	35	48, 858, 000	149, 406, 000	3. 1
Group II	8	9, 511, 000	19, 816, 000	2. 1
Group III	17	18, 062, 000	28, 314, 000	1. 5

According to this table there was a surplus in the I group of 46,804,000 chetverts, and in the III group a deficit of 9,616,000 chetverts. Deducting the last from the former, and also the average export of the last few years, and the amount consumed by the distilleries, there remain 3,440,000 chetverts grain, and nearly 43½ millions of chetverts of potatoes (which represent, reduced to rye value, 8,726,000 chetverts). The total remainder (12,500,000 chetverts) when compared with the total yield (197,500,000) is not very large, but still enough to guarantee the nourishment of the population.

The superfluous grain is exported in its natural condition. Milling is carried on only for local necessities, and the export of flour and groats is wholly unimportant. The amount consumed by distilleries is not particularly large, and will hardly exceed 7,000,000 chetverts.

AGRICULTURE IN ASIATIC RUSSIA.

Siberia, notwithstanding its size, is agriculturally but little developed, which is due less to climate, which in many regions is extremely favorable, than to economic and ethnographic causes.

The absence of thoroughfares, the small local demand consequent upon a sparse population, scattered over immense tracts of land, and consisting generally of aborigines, who have little or no interest in agriculture are the causes why Siberia is so far behind all other agricultural countries.

The peculiar character of the land tenure gives also a peculiar character to agriculture. In the government of Tomsk, for instance, scarcely any land is owned privately, either by large landed proprietors, merchants, or arendators. Peasant farms only exist. There is, consequently, no private initiative to speak of, and agriculture is still in its swaddling clothes.

Notwithstanding an unlimited amount of fertile land, but few possess a fixed and definite portion thereof. The peasant generally plows and sows whenever it chances to please him, without paying the least attention to the place or distance from his house. Manuring is the exception, and an improvement or progress in the manner of cultivating the soil cannot be reported. Colonists from European Russia work better, but ordinarily cultivate only enough to meet their own necessities.

Among the Siberian governments Tomsk takes the first place with a sowing of 1,312,000 chetverts grain, and 122,000 chetverts of potatoes. Nevertheless agriculture does not thrive even here, particularly among the aborigines, who are excessively poor. In the Amoor district agriculture occupies about 50 per cent. of the population.

The following table shows the average of the sowings and harvests, for the last five years, in the principal provinces of Asiatic Russia:

AVERAGE AMOUNT SOWN.

[In thousands of chetverts.]

Governments.	Population.	Wheat.			Rye.
		Winter.	Summer.	Total.	
Tobolsk	1, 228, 433	2. 0	297. 8	298. 6	248. 0
Tomsk	1, 032, 599	4. 3	208. 7	213. 0	189. 7
Yenisseisk	428, 577	64. 8	88. 0	159. 8	119. 2
Irkutsk	383, 578	....	....	49. 0	105. 0
Scyr Darya district	1, 098, 657	45. 7	87. 3	133. 0	....
Ural distrist	520, 131	....	62. 5	62. 5	4. 8
Semipalatinsk district	525, 979	....	....	....	1. 5
Amoor district	34, 859	....	3. 0	3. 0	....
Yakutsk district	242, 001	....	1. 0	1. 0	....
Turgai district	320, 065	....	7. 7	7. 7	....
Total	5, 804, 719	96. 4	578. 3	683. 2	489. 8

Governments.	Oats.	Barley.	Buck-wheat.	Other cereals.	Total grain.	Potatoes.
Tobolsk	563. 8	51. 0	9. 0	141. 4	1, 311. 8	122. 0
Tomsk	261. 0	46. 3	4. 0	142. 0	856. 0	58. 5
Yenisseisk	155. 8	22. 8	5. 2	11. 8	467. 6	....
Irkutsk	98. 0	45. 3	3. 3	161. 7	462. 3	47. 0
Scyr Darya district	....	68. 3	....	63. 0	264. 3	1. 0
Ural district	14. 3	....	....	5. 7	87. 3	0. 7
Semipalatinsk district	36. 0	....	....	....	37. 5	7. 0
Amoor district	7. 2	0. 6	3. 3	7. 5	21. 6	4. 2
Yakutsk district	0. 2	11. 4	....	3. 6	16. 2	9. 8
Turgai district	5. 2	2. 0	....	6. 8	15. 0	....
Total	849. 5	159. 6	19. 4	352. 7	2, 591. 7	213. 1

AVERAGE AMOUNT HARVESTED.

[In thousands of chetverts.]

Governments.	Wheat.			Rye.
	Winter.	Summer.	Total.	
Tobolsk	5. 0	1, 318. 6	1, 320. 9	1, 004. 8
Tomsk	26. 7	1, 003. 5	1, 030. 2	922. 0
Yenisseisk	354. 0	353. 0	707. 0	485. 0
Irkutsk	....	....	138. 3	436. 7
Scyr Darya district	228. 6	556. 0	774. 6	....
Ural district	....	339. 2	339. 1	50. 3
Semipalatinsk district	....	....	....	7. 3
Amoor district	....	13. 5	13. 5	....
Yakutsk district	....	2. 4	6. 4	....
Turgai district	....	58. 0	58. 0	....
Total	420. 2	2, 751. 0	3, 246. 5	2, 132. 6

Governments.	Oats.	Barley.	Buck-wheat.	Other cereals.	Total grain.	Potatoes.
Tobolsk	2, 312. 4	202. 6	45. 2	531. 2	5, 416. 8	629. 4
Tomsk	1, 247. 5	199. 8	15. 8	629. 8	4, 046. 0	296. 0
Yenisseisk	644. 6	102. 7	21. 3	39. 3	1, 999. 9	145. 4
Irkutsk	299. 3	129. 3	9. 0	419. 6	1, 427. 3	192. 7
Scyr Darya district	....	455. 3	....	798. 6	2, 028. 6	7. 0
Ural district	85. 8	....	....	31. 0	506. 2	1. 2
Semipalatinsk district	199. 3	....	....	....	206. 6	18. 7
Amoor district	30. 8	2. 7	20. 7	31. 8	99. 5	22. 3
Yakutsk district	1. 1	42. 0	....	13. 4	62. 9	42. 2
Turgai district	38. 3	66. 0	....	40. 5	147. 6	....
Total	3, 800. 7	728. 5	91. 0	1, 618. 7	11, 618. 0	618. 0

The total harvest of grain in ten governments of Asiatic Russia, exclusive of seed sown, gives an annual average of 9,027,000 chetverts, which, with a population of 5,805,000, gives 1.53 chetverts per head, to which should be added 0.75 chetverts potatoes per capita, the total yield being 405,000 chetverts.

EDGAR STANTON,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
St. Petersburg, January 27, 1883.

THE ENGLISH POSTAL SAVINGS BANK SYSTEM.

REPORT BY CONSUL LATHROP, OF BRISTOL.

Circumstances indicate the establishment, in the near future, in the United States of a postal savings bank system; therefore some interest will probably attach to the figures presented in the recently issued report of the English postmaster-general. It appears that not only has each succeeding year of the twenty-two that have elapsed since the savings bank was inaugurated shown a decided increase in the volume of business, but that the system is rapidly becoming all but universal, as nations one by one are beginning to appreciate its great merit as an encouragement to thrift and industry. Not only is it desirable to place every incentive towards saving before individuals of a nation for their own sake, but also for the ultimate benefit of the nation itself; the gain to which is both immediate and direct. It is universally admitted that the wonderful and unprecedented recovery of the French nation from its financial war embarrassments was due mostly to the number and amount of the small hoardings of the small farmers and peasants, whose depository was some dark corner of the cottage, a constant source of anxiety and productive of no interest. But the French Government has, in the last two years, provided a secure place of deposit by establishing a postal bank; so also has Austria, whose Emperor made the first deposit on the first day of this year. The Netherlands, Italy, Canada, and portions of Australia are maintaining the system; while Sweden, Switzerland, and some of the British colonies are making inquiries with a view to its adoption.

In the English system the requirements are surprisingly few and simple, and the checks to fraud secure and effectual. Deposits of one shilling are received, the limit being £30 per year, or £150 altogether from one depositor. Single pennies may be saved by purchasing stamps with them, the stamps being then affixed to a prescribed form, and paid in as a shilling deposit when twelve are accumulated. Each depositor gets a book in which deposits are credited; besides which he receives in due course through the mail a receipt from the head office at London for each amount. Interest is allowed at the rate of two and a half per cent., and is credited each year, on the anniversary of the first deposit, in the depositor's book, which is supposed to be forwarded at that time to London for the purpose. The books, as well as all matters pertaining to the savings bank department, travei postage free and are mailed unstamped.

It is further provided that if a depositor's account foot up a certain amount, he may, if he desires, transfer it into Government stock. Should a depositor make application for this transfer, he is charged with the market price of the stock and a commission and a "certificate of investment" is sent him.

Withdrawals are easily effected, and deposits can be taken out with but little delay at any post-office desired; the only step necessary being to procure a warrant from the head office at London, which will be cashed on presentation with the pass-book at the designated post-office.

It is provided by law that the authorities controlling "charitable" and "provident" societies and "penny banks" may, on filing a copy of their rules, be allowed to deposit considerably beyond the usual limit, or even under certain circumstances without restriction as to amount. Under this law authority was given last year to 1,533 societies to deposit their funds in the savings bank, and a similar permission was accorded to 283 penny banks, 151 of which were in schools, where direct effort is made by means of circulars, suggestions from teachers, &c., to encourage habits of saving and self-denial. In London alone, in the year 1881, the sum of £1,416 was deposited by some 4,500 depositors in the London Board School Penny Banks.

But this fatherly care manifested by school boards in the savings of their flocks is equalled by the Government in its endeavors to encourage laborers to thrift, and the result is seen in a practice which, though most excellent in itself, could only exist amongst the "paternal" Governments of Europe. It would justly be considered by the American laborer an unwarrantable interference were the nearest post-office to send a clerk to stand at his side on pay-day and encourage him to make a deposit then and there in the postal savings bank; yet such a practice has been pursued in England for years and with success. The following table gives a list of some of the visits made during the year 1882, together with the number of depositors and amount of deposits:

Name of works, &c.	Number of visits during 1882.	Deposits.				Remarks.
		No.	Amount.			
			£	s.	d.	
Messrs. Bass & Co.'s Brewery, Burton-on-Trent.	60	198	172	15	0	Ceased July 29, 1882.
Washford Mills, Needle and Fish Hook Manufactory, Redditch.	12	61	40	12	0	
Windsor Street Gas Works, Birmingham....	15	4	0	7	0	Ceased April 14, 1882.
Saltley Gas Works, Birmingham	52	15	18	19	0	Ceased Jan. 5, 1883.
Messrs. Hazell & Co.'s Printing Works, Aylesbury.	52	232	140	16	0	
Messrs. Hazell & Co.'s Printing Works, Kirby street, London.	37	78	36	3	0	Commenced April 22, 1882, and ceased Jan. 27, 1883.
Jewish Working Men's Club and Institute, Aldgate.	50	88	68	4	0	
Holy Trinity, Kilburn Branch of Church of England Temperance Society, Kilburn, Manor Terrace.	26	84	80	10	0	
Shustoke Reservoir Works, Birmingham	31	87	122	7	0	Ceased Aug. 5, 1882.
Steam Sewing Mills, Newcastle, Staff	36	211	19	8	0	Commenced April 22, 1882.
Weekly Meetings of "Blue Ribbon (Temperance) Army," Albert Hall, Swansea.	39	732	278	5	0	Commenced April 8, 1882.
Weekly Meetings of "Blue Ribbon Army," Temperance Hall, Walsall.	7	28	12	14	0	Commenced Oct. 14, 1882, and ceased Nov. 25, 1882.
Total	417	1,818	991	0	0	

The total amount deposited in the postal savings bank (exclusive of Government stock) on the 31st December, 1882, was £39,037,821, an increase over the previous year's deposits of nearly three million sterling, the largest annual progress ever made. The amount of interest credited to depositors was £891,629. The average amount of each deposit was £2, and of each withdrawal £5 5*s*. The daily average of deposits was

20,235 in number and £42,175 in amount; and of withdrawals, 6,357 in number, and £34,116 in amount. The greatest number of deposits made on one day was 43,508, and the largest amount was £113,899. There were 788,858 accounts opened during the year, and 537,494 closed, leaving, on December 31, 1882, 2,858,976 open accounts, apportioned as follows:

Country.	Number.	Proportion to population.	Average balance due to each depositor.
			£ s. d.
England and Wales	2,643,785	or 1 to 10	13 14 10
Scotland	108,701	or 1 to 35	7 3 9
Ireland	106,490	or 1 to 48	18 1 7

The total amount of Government stock standing at the credit of depositors at the close of the year was £1,143,717, held by 16,609 persons. The average amount of stock held by each person at the end of the year was nearly £69. The transactions were apportioned as follows:

Country.	Investments.		Sales.		Stock certificates.	
	No.	Amount.	No.	Amount.	No.	Amount.
		£ s. d.		£ s. d.		£ s. d.
England and Wales	10,714	519,833 18 11	3,785	151,458 0 9	61	4,650 0 0
Scotland	216	8,773 13 3	118	5,305 5 3	4	300 0 0
Ireland	1,223	59,603 11 3	452	20,549 1 3	12	1,200 0 0

I append several very complete and interesting tables from the postmaster-general's report, from which a most thorough knowledge of the workings of the postal savings bank of Great Britain may be gained.

POST-OFFICE SAVINGS BANK.

Value of securities held on account of post-office savings banks at average price on the 31st *December,* 1882.

Securities standing in the names of the commissioners for the reduction of the national debt on account of the post-office savings banks fund.				Value of securities at average price on December 31, 1882.			Dividends accrued but not received at the end of the year.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Consolidated 3*l.* per cents	8, 810, 698	10	9	8, 898, 806	0	0	128, 569	3	2
Reduced 3*l.* per cents	3, 807, 906	5	0	3, 850, 745	0	0			
New 3*l.* per cents	9, 474, 915	13	8	9, 581, 508	0	0			
New 2½*l.* per cents	1, 591, 430	11	2	1, 368, 630	0	0	19, 352	6	3
Turkish guaranteed 4*l.* per cent. bonds	103, 100	0	0	107, 739	0	0			
Exchequer (March) bills	20, 000	0	0	19, 990	0	0	182	9	3
Exchequer bonds	750, 000	0	0	750, 000	0	0	8, 225	11	8
Exchequer (Suez) bonds	1, 547, 600	0	0	1, 547, 600	0	0	15, 262	4	10
Bonds per 32 & 33 Vict., c. 42, and 43 Vict., c. 4, repayable by Irish land commission, as legal successors to the commissioners of church temporalities in Ireland, per 44 & 45 Vict., c. 71, and bonds per 45 & 46 Vict., c. 62	650, 000	0	0	650, 000	0	0			
Canada guaranteed 4*l.* per cent. bonds	37, 500	0	0	42, 562	0	0			
Advance to public works loan commissioners	2, 077, 816	14	0	2, 077, 817	0	0	15, 536	13	5
Annuities for terms of years, expiring at various periods of the year 1885	2, 642, 770	19	9	*a* 6, 844, 433	0	0			
Annuity under revenue, friendly societies, and national debt act, 1882 (45 & 46 Vict., c. 72 s. 23), expiring September 8, 1892	5, 428	18	8	*a* 46, 504	0	0			
Annuity for a term of years, granted to repay advances per act 32& 33 Vict., c. 42, payable by Irish land commission as legal successors to the commissioners of church temporalities in Ireland per 44 & 55 Vict., c. 71, expiring December 31, 1905	138, 800	0	0	*a* 2, 236, 163	0	0			
Annuity under Indian loan act, 1881, expiring July 5, 1906	115, 864	10	0	*a* 1, 950, 890	0	0			
Red Sea and Indian telegraph annuity, expiring August 4, 1908	3, 100	0	0	*a* 47, 275	0	0			
Annuities of an amount sufficient to repay sums advanced under pensions commutation acts, 32 & 33 Vict., c. 32, and 34 & 35 Vict., c. 36, to December 31, 1880	96, 022	8	0	*a* 348, 308	0	0			
Advances under pensions commutation act during year ended December 31, 1882, per 34 & 35 Vict., c. 36, in respect of which an annuity has not been granted	209, 965	12	6	209, 966	0	0	4, 107	12	6
				40, 578, 936	0	0	191, 236	1	1
Add value of securities							40, 578, 936	0	0
cash balance in Bank of England							92, 468	2	3
							40, 862, 640	3	4

a Value, inclusive of interest, to December 31, 1881.

POST-OFFICE SAVINGS-BANKS.

Years.	Number of post-office savings-banks.	Number of deposits.	Amount of deposits.	Average amount of each deposit.			Interest credited to depositors.	Number of withdrawals.	Amount of withdrawals.
				£	s.	d.			
From September 16, 1861, to December 31, 1862	2, 535	639, 216	£2, 114, 669	3	6	2	£22, 189	97, 294	£438, [illegible]
1863	2, 991	842, 848	2, 651, 209	3	2	11	55, 204	197, 431	1, 027, [illegible]
1864	3, 081	1, 110, 762	3, 350, 000	3	0	3	100, 493	309, 242	1, 834, [illegible]
1865	3, 321	1, 302, 309	3, 719, 017	2	17	1	132, 870	407, 412	2, 318, [illegible]
1866	3, 507	1, 525, 871	4, 400, 657	2	17	8	169, 172	515, 348	2, 973, [illegible]
1867	3, 629	1, 592, 344	4, 643, 906	2	18	4	207, 649	581, 972	3, 222, [illegible]
1868	3, 813	1, 757, 303	5, 333, 638	3	0	8	252, 897	637, 144	3, [illegible]
1869	4, 047	1, 998, 644	5, 787, 218	2	17	10	297, 392	716, 466	4, 227, [illegible]
1870	4, 082	2, 135, 993	2, 995, 121	2	16	1	337, 961	787, 173	4, 758, [illegible]
1871	4, 335	2, 362, 621	6, 664, 629	2	16	5	376, 738	845, 279	5, 115, [illegible]
1872	4, 607	2, 745, 245	7, 699, 916	2	16	1	430, 079	933, 975	5, [illegible]
1873	4, 853	2, 917, 698	7, 955, 740	2	14	6	477, 851	1, 025, 333	6, 584, [illegible]
1874	5, 068	3, 044, 692	8, 341, 256	2	14	10	524, 559	1, 069, 669	6, 876, [illegible]
1875	5, 260	3, 132, 433	8, 783, 852	2	16	1	571, 584	1, 112, 637	7, [illegible]
1876	5, 448	3, 166, 136	8, 982, 350	2	16	9	619, 331	1, 195, 603	7, [illegible], 477
1877	5, 668	3, 267, 851	9, 166, 738	2	16	1	661, 459	1, 252, 965	8, [illegible]
1878	5, 831	3, 360, 636	9, 485, 391	2	16	5	699, 603	1, 304, 617	8, 514, [illegible]
1879	6, 016	3, 347, 828	9, 887, 109	2	19	1	743, 636	1, 418, 543	9, [illegible]

English Post-office Savings-Banks—Continued.

Years.	Average amount of each withdrawal.	Charges of managemen	Average cost of each transaction, viz, of each deposit or withdrawal.	Number of accounts opened.	Number of accounts closed.	Number of accounts remaining open at close of the year.	Amount, inclusive of interest, standing to credit of all open accounts at close of the year.
	£ s. d.		s. d.				
'rom September 16, 1861, to December 31, 1862....	4 10 2	£20, 591	$6\frac{7}{10}$	205, 928	27, 433	178, 495	£1, 698, 221
863	5 4 0	25, 401	†$5\frac{8}{10}$	185, 934	44, 760	319, 669	3, 377, 480
864	5 18 8	45, 856	†$7\frac{7}{10}$	226, 153	74, 964	470, 858	4, 993, 123
865	5 13 10	49, 527	$6\frac{9}{10}$	239, 686	99, 160	611, 384	6, 526, 400
866	5 15 4	59, 451	$6\frac{8}{10}$	266, 542	131, 672	746, 254	8, 121, 175
867	5 10 9	62, 700	$6\frac{8}{10}$	264, 341	155, 612	854, 983	9, 749, 929
868	5 15 2	61, 860	‡$6\frac{2}{10}$	289, 866	179, 195	965, 154	11, 666, 655
869	5 17 11	62, 060	$5\frac{4}{10}$	323, 723	208, 092	1, 085, 785	13, 524, 209
870	6 0 10	67, 945	$5\frac{6}{10}$	333, 648	236, 280	1, 183, 153	15, 099, 104
871	6 1 0	69, 427	$5\frac{3}{10}$	470, 745	250, 406	1, 303, 492	17, 025, 004
872	6 4 11	78, 404	$5\frac{1}{10}$	424, 848	285, 887	1, 442, 448	19, 318, 339
873	6 8 5	84, 160	$5\frac{1}{10}$	433, 478	319, 281	1, 556, 645	21, 167, 749
874	6 8 7	99, 616	$5\frac{8}{10}$	442, 501	330, 413	1, 668, 733	23, 157, 469
875	6 11 8	122, 325	$6\frac{9}{10}$	438, 836	330, 466	1, 777, 103	25, 187, 845
876	6 10 4	125, 912	$6\frac{8}{10}$	437, 083	§511, 762	§1, 702, 374	26, 996, 550
877	6 9 0	152, 184	‡$8\frac{1}{10}$	458, 221	§364, 355	§1, 791, 240	28, 740, 757
878	6 10 6	‖448, 543	‖1 $11\frac{1}{10}$	447, 549	346, 033	1, 892, 756	30, 411, 563
879	6 7 4	¶192, 280	¶$9\frac{7}{10}$	445, 500	349, 779	1, 998, 477	32, 012, 134

---

† The falling off in the cost per transaction and in the percentage of cost of management in 1863 and he increase in these items in 1864 are attributable to one and the same cause, viz, to the payment luring 1864 of various charges properly belonging to 1863.

‡ In 1868, the charge for postage, amounting to about ¼*d.* per transaction, ceased to be debited against he savings-bank department, but in 1877 the sum of 22.543*l.* 12*s.* was charged under this head for ine months. Had no charge for postage been made in this year the cost per transaction would have ontinued at $6\frac{2}{10}$*d.*

§ 167,380 accounts having small balances, which had had no transactions for a considerable period, rere transferred to the dormant account in the year 1876, and a similar transfer of 21,779 accounts ras made in 1877, the number of open accounts in those years being reduced accordingly. The total umber of such accounts included in the dormant account at the end of 1879 was 187,567.

‖ The sum of 448,543*l.* for charges of management in 1878 includes 214.434*l.* for arrears of postage for he nine years from 1st April, 1868, to 31st March, 1877, and also 73,419*l.* paid on account of the new uilding in Queen Victoria street and its site. The effect of these additions to the charges proper to he year is to raise the cost of a transaction to 1*s.* $11\frac{1}{10}$*d.*, and the percentage of expenses to capital to *l.* 9*s.* 6*d.* If the working charges proper to the year 1878 only are taken into account, including 5 per ent. upon the expenditure in respect of the new building, the cost per transaction will be $8\frac{3}{10}$*d.*, and he percentage of expenses to capital 10*s.* 7¾*d.* Further, if the arrears of postage charged to the year 878 be added to the expenses of the years which they affect, viz. 1868 to 1877, inclusive, the average nnual cost of a transaction for those years will be 7½*d.*, and the average percentage of expenses to capital rill be 11*s.* 3¼*d.*

¶ The sum of 192,280*l.* for charges of management in 1879 includes the sum of 25,564*l.* paid in respect f the new building. Omitting this amount, but adding interest at the rate of 5 per cent. thereon, as rell as on the expenditure of 73,419*l.* for similar purposes in 1878, the cost per transaction will be $8\frac{6}{10}$*d.*, nd the percentage of expenses to capital 10*s.* 8¾*d.*

English Post-office Savings-Banks—Continued.

Years.	Average amount standing to credit of each open account at close of the year.			Percentage of cost of management to total funds in possession of the post-office savings-bank.			Total sum standing to credit of post-office savings-banks on books of national debt commissioners at close of the year.	Balance in hands of Postmaster-General, after making provision for outstanding warrants, at close of the year.	Total balance in hand, applicable to payment of depositors, at close of the year.*	Number at close of the year of old savings-banks and post-office banks combined.	Number at close of the year of the depositors in old savings-banks and post-office banks combined.
	£	s.	d.	£	s.	d.					
From September 16, 1861, to December 31, 1862	9	10	3	1	4	3	*£1, 659,032	£35, 692	£1, 694, 724	3, 157	1, 732, 55
1863	10	11	4	†0	15	0	*3, 328, 182	44, 413	3, 372, 595	3, 594	1, 876, 39
1864	10	12	1	†0	18	4	*4, 995, 663	5, 522	5, 001, 185	3, 659	1, 967, 69
1865	10	13	6	0	15	2	*6, 582, 329	4, 327	6, 586, 656	3, 822	2, 078, 34
1866	10	17	7	0	14	7¾	*8, 231, 176	25, 791	8, 256, 967	4, 058	2, 156, 29
1867	11	8	0	0	12	10¼	9, 867, 703	47, 690	9, 915, 393	4, 268	2, 239, 34
1868	12	1	9	0	10	7¼	11, 963, 053	....	11, 899, 400	4, 331	2, 336, 65
1869	12	9	1	0	9	2	13, 755, 547	19, 386	13, 774, 933	4, 554	2, 464, 51
1870	12	15	3	0	9	0	15, 305, 040	158, 888	15, 463, 928	4, 578	2, 567, 9
1871	13	1	3	0	8	2	17, 303, 815	166, 456	17, 470, 271	4, 895	2, 702, 57
1872	12	7	10	0	8	1¼	19, 559, 804	301, 070	19, 860, 874	5, 087	2, 867, 59
1873	12	12	0	0	7	11¼	21, 745, 442	82, 850	21, 828, 292	5, 334	3, 062, 13
1874	13	17	7	0	8	7¼	24, 030, 711	....	24, 016, 836	5, 543	3, 134, 67
1875	14	3	6	0	9	8½	26, 127, 967	94, 518	26, 222, 485	5, 731	3, 255, 26
1876	15	17	2	0	9	3¾	28, 004, 732	106, 833	28, 111, 565	5, 912	3, 195, 76
1877	16	0	11	0	10	7	29, 713, 529	104, 057	29, 817, 586	6, 126	3, 301, 9
1878	16	1	4	‖1	9	6	30, 946, 963	242, 362	31, 189, 325	6, 285	3, 406, 4
1879	16	2	0	¶0	12	0	32, 689, 001	112, 948	32, 801, 949	6, 465	3, 495, 1

*** These sums do not include the dividends accruing to the post-office savings-banks on the 5th Ja uary (that is, five days after the close of the account in each year), up to the year 1866, inclusive, bu after that year the securities belonging to the banks have been valued by the commissioners for the reduction of the national debt, and the amount, including dividends due but not paid at the end of the year, has been inserted in the above return.**

† The falling off in the cost per transaction and in the percentage of cost of management in 1863 an the increase in these items in 1864 are attributable to one and the same causes, viz, to the paymen during 1864 of various charges properly belonging to 1863.

English Postal Savings-Bank—Statistics for the years 1880, 1881, *and* 1882.

Description.	1880.	1881.	1882.
Number of post-office savings banks	6, 233	6, 513	6, 999
Number of deposits	3, 755, 689	5, 699, 876	6, 151, 469
Ordinary	3, 754, 064	5, 676, 066	6, 110, 208
For immediate investment in stock	1, 625	10, 382	10, 047
Sales of stock and stock certificates obtained*	(†)	2, 125	4, 432
Dividends	(‡)	11, 303	26, 782
Total	3, 755, 689	5, 699, 876	6, 151, 469
Amount of deposits	£10, 301, 152	£11, 867, 155	£12, 821, 230
Ordinary	£10, 219, 631	£11, 345, 957	£12, 227, 528
For immediate investment in stock	79, 641	427, 312	382, 847
Sales of stock and stock certificates obtained*	1, 880	83, 447	184, 322
Dividends	(‡)	10, 439	26, 533
Total	10, 301, 152	11, 867, 155	12, 821, 230
Average amount of each ordinary deposit	£2 14 5	£2 0 0	£2 0 0
Interest credited to depositors	£777, 985	£826, 990	£891, 629
Number of withdrawals	1, 465, 331	1, 728, 700	1, 935, 129
Ordinary	1, 465, 300	1, 712, 866	1, 918, 544
Investments in stock	(†)	13, 709	12, 153
Sales of stock and stock certificates obtained	31	2, 125	4, 432
Total	1, 465, 331	1, 728, 700	1, 935, 129
Amount of withdrawals	£9, 346, 634	£10, 244, 287	£10, 869, 534
Ordinary	£9, 216, 564	£9, 469, 668	£10, 094, 974
Investments in stock, including commission	128, 190	691, 156	590, 225
Sales of stock and stock certificates obtained, including commission and fees	1, 880	83, 463	184, 335
Total	9, 346, 634	10, 244, 287	10, 869, 534
Average amount of each ordinary withdrawal	£6 5 9	£5 10 7	£5 5 3
Charges of management	£188, 891§	£200, 574	£221, 653
Average cost of each transaction, namely, of each deposit or withdrawal in the year 1880, and of each deposit, withdrawal, or stock transaction in the years 1881 and 1882	$8\frac{7}{10}$*d.*§‖	$6\frac{5}{10}$*d.*	$6\frac{6}{10}$*d.*
Number of accounts opened	554, 658	880, 831	788, 858
Number of accounts closed	358, 163	458, 191	537, 494
Number of accounts remaining open at close of the year	2, 184, 972	2, 607, 612	2, 858, 976
Amount, inclusive of interest, standing to credit of all open accounts	£33, 744, 637	£36, 194, 495	£39, 037, 821
Average amount standing to credit of each open account	£15 8 11	£13 17 7	£13 13 1
Percentage of cost of management to total funds in possession of the post-office savings bank	11*s.* 2¼*d.*§	11*s.* 1*d.*	11*s.* 4½d.
Total sum standing to credit of post-office savings banks on books of national debt commissioners at close of the year	£34, 375, 936	£36, 509, 923	£40, 862, 640
Balance in hands of postmaster-general after making provision for outstanding warrants at close of the year	£232, 945	£236, 453	£145, 924
Estimated value of the central savings bank premises in Queen Victoria street	....	....	£120, 000
Total value of assets applicable to payment of depositors	£34, 608, 881	£36, 746, 376	£41, 128, 564
Number at close of the year of old savings banks and post-Office savings banks combined	6, 675	6, 950	7, 429
Number at close of the year of depositors in old savings banks and post-office savings banks combined	3, 704, 777	4, 140, 098	4, 411, 958

---

* When stock is sold or a stock certificate obtained, the amount is placed to the credit of the savings bank account, so as to be dealt with as a withdrawal.

† The numbers of these transactions were not included for the year 1880.

‡ The first dividend upon stock bought through the post-office savings bank was not due until 5th January 1881.

§ The sum of 188,891*l.* for charges of management in 1880 includes 16,373*l.* paid in respect of the new building. Omitting this amount, the cost per transaction was $7\frac{9}{10}$*d.* and the percentage of expenses to capital 10*s.* 2¼*d.*

‖ If the stock transactions for the year 1880 had been included, the average cost per transaction for that year would still have remained the same, viz., $8\frac{7}{10}$*d.*

ENGLISH POST-OFFICE SAVINGS BANK.

BALANCE SHEET.

Return of the balance sheets of the post-office savings banks for the year 1882, *showing the balance due to depositors, the amount of expenses remaining unpaid, the value of securities according to the average price of the day on* 31*st December* 1882, *amount of cash in hand, and dividends accrued but not received at the end of the year, &c., and the surplus of assets over liabilities.*

Liabilities.	£ s. d.	Assets.	£ s. d.	£ s. d.
Balance due to depositors on December 31, 1882, (including interest).	39,037,821 3 1	Value of securities according to the average price of the day on December 31, 1882.	40,770,172 1 1	
Amount of expenses remaining unpaid (partly estimated).	8,374 10 0	Amount of cash in hands of commissioners for the reduction of the national debt.	92,468 2 3	
Surplus of assets over liabilities.	2,082,369 3 7			
		Total amount in the hands of the commissioners for the reduction of the national debt.	....	40,862,640 3 4
		Amount received for issuing new deposit books.	1,779 19 4	
		Less, amount paid to the national debt commissioners.	883 4 4	
				896 15 0
		Amount in the hands of Her Majesty's postmaster-general.	186,779 6 4	
		Less, amounts required to meet warrants issued to depositors but not cashed on December 31, 1882.	41,751 8 0	
				145,027 18 4
		Value of the central savings bank premises in Queen Victoria street, E. C.	....	120,000 0 0
Total	41,128,564 16 8			41,248,564 16 8

	£ s. d.
Total amount received from depositors, including interest, to December 31, 1882	159,129,230 6 8
Total amount repaid to depositors to December 31, 1882	120,091,409 3 5

Number of transactions:

Deposits	55,857,464
Withdrawals	19,537,262

Number of accounts:

Opened	8,453,374
Closed	5,594,398
Remaining open	2,858,976

The total cost of the post-office savings banks from their establishment to December 31, 1882, including the sum of 8,374*l*. 10*s*. 0*d*. charged as above, was 2,447,735*l*. 2*s*. 10½*d*.

The total number of transactions, *i. e.*, deposits and withdrawals, in the period was 75,394,726.

The average cost of each transaction from the commencement of post-office savings bank business to the end of the year 1882 was $7\frac{7}{10}$*d*.

Prior to the passing of the post-office savings bank act, 1861, it was estimated (see Parliamentary Paper, No. 523, 1861) that the average cost of each transaction would be 7*d*.

The sums of £126,279 14*s*. 11*d*., £147,116 16*s*. 0*d*., £77,787 12*s*. 1*d* , £125,345 4*s*. 11*d*., £144,879 3*s*. 11*d*., and £123,139 0*s*. 1*d*. have been paid into the exchequer out of the funds of the post-office savings banks in the years 1877, 1878, 1879, 1880, 1881, and 1882 respectively under sec. 14 of the act 40 Vict., c. 13, being the excess of interest which had accrued during the years 1876, 1877, 1878, 1879, 1880, and 1881. The sum of £70,000, the cost of the site of the new savings bank building in Queen Victoria street, and £43,420 towards the cost of the new building, have been paid for out of the funds of the post-office savings banks.

POST-OFFICE SAVINGS BANK.

Investments in Government stock.

	1880.*	1881.	1882.
Number of stock accounts opened	2,162	11,019	7,551
Number of stock accounts closed	31	1,338	2,754
Number of stock accounts remaining open at close of the year	2,131	11,812	16,609
Number of investments	2,230	13,709	12,153
Number of sales	9	2,023	4,355
Number of stock certificates obtained	22	102	77
Number of deposits for immediate investment	1,625	10,382	10,047
Amount of deposits for immediate investment	£79,641	£427,312	£382,847
Average amount of each deposit for immediate investment	£49	£41 8*s.* 2*d.*	£38 2*s.* 1*d.*
Number of savings bank accounts opened with deposits for immediate investmet	563	2,875	1,913
Amount of money invested	£128,013	£690,181	£589,395

	1880.	1881.	1882.
From deposits made for the purpose	£79,641	£427,312	£382,847
From existing deposits	48,372	262,869	206,548
	128,013	690,181	589,395

	1880.*	1881.	1882.
Amount of commission and Bank of England fees	£177	£1,112	£1,112

	1880.		1881.		1882.	
	£	*s.*	£	*s.*	£	*s.*
Commission	175	10	1,104	10	1,105	17
Bank of England fees	1	10	7	10	6	3
	177	0	1,112	0	1,112	0

	1880.*			1881.			1882.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Amount of stock bought	129,514	0	0	694,957	0	0	588,211	0	0
Average amount of each purchase of stock	58	1	6	50	13	10	48	8	0
Amount of stock sold	385	0	0	75,868	0	0	177,122	0	0
Average amount of each sale of stock	42	15	6	37	10	0	40	14	0
Amount of stock certificates obtained	1,500	0	0	7,700	0	0	6,150	0	0
Amonnt of stock transferred to old savings banks	....			50	0	0	190	0	0
Amount of stock remaining to credit of stockholders at close of the year	127,629	0	0	738,968	0	0	1,143,717	0	0
Average amount of stock remaining to credit of each stockholder at close of the year	59	17	9	62	11	3	68	17	3

* From November 22 to December 31.

LORIN A. LATHROP,
Consul.

UNITED STATES CONSULATE,
Bristol, August 31, 1883.

SILK CULTURE IN PERSIA.

REPORT BY CONSUL-GENERAL BENJAMIN, OF TEHERAN.

I have the honor to submit some facts regarding the culture of silk in Persia.

The growing importance of the silk manufacture of the United States naturally adds to the value of all information regarding the culture of silk in Persia.

The quality of this grade of silk is acknowledged to be of the first order. But, strange to say, until recently very little of this silk has found its way to the United States.

The greater part of what has been exported has found its way to Russia, a little has reached France and Italy, while the use that has been made of it in Persia is evidenced by the very choice textile fabrics for which that country has been celebrated for ages.

We find the first mention of European merchants trading in Gilan silk in Marco Polo's work, about 1290 (lib. 1, c. 15). Marco Polo, in speaking of the Caspian Sea, says: "Genoese merchants commenced its navigation some short time ago, from whence comes the silk which is called Ghele," *i. e.*, silk from the province of Gilan, in Northern Persia.

The Florentine, Balducci Pegoletti, in his "Trattato della mercatura," published in 1335, also speaks of "seta Ghella," Gilan silk.

The Englishman, R. Chancellor, traveled to Moscow in 1553, and his companion, Jenkinson, who penetrated as far as Bokhara in 1556, made a report on the silk trade of the Shirwan district, in the Caucasus, for Queen Elizabeth, who sent him to Persia in 1562, at which time he visited Derbend, Shemakha, Cazvin, &c.

Edwards, another Englishman, who followed Jenkinson in 1567, reported that the Gilan silk was much better and comparatively cheaper than that of the Caucasus. He therefore established a factory near Resht, while Chapman, his companion, traveled through and explored Gilan in 1568. The first English vessel on the Caspian, and probably the last, was floated in 1573, and was sent with silk to Astrakhan.

The expedition was unsuccessful, as piratical Cossacks of the Volga plundered the vessel of all it contained.

Holland, a little later, had factories at Hormuz, near the present Bender Abbas; and Holstein, together with Hamburg, thinking to be able to divert some of the Dutch commerce to their own advantage sent embassies to Russia and Persia for the sake of concluding commercial treaties, and opening the transit of merchandise through Russia, offering large sums of money to accomplish the latter purpose. The results of the embassy to Persia in 1638 are related by Ad. Olearius, in his "Persische Reise" (new edition, Hamburg, 1696). He states that the total produce of raw silk in Persia was 10,000 to 20,000 bales (one bale being equal to 216 pounds). Gilan produced 8,000 bales; Khorassan, 3,000; Mazanderan, 2,000; Shirwan, 2,000; Karabagh, 2,000; and Georgia the remainder. This would give 13,000 bales, or 2,808,000 pounds for the present area of Persia alone, Shirwan, Karabagh, and Georgia no longer belonging to that country. He further says that 1,000 bales, or 216,000 pounds (very nearly what it is at present), were used for home manufacture, and that the remainder was exported from Hormuz to India, Turkey, Italy, England, and Holland, in Dutch ships.

The price of raw silk in the time of Olearius was 48 to 52 cents per pound—that is, about one-fourth of the present price, giving a total value of $1,404,000. Chardin, who wrote in 1669, thirty years later than Orlearius, says that the yearly produce was 22,000 bales—Gilan producing 10,000 bales, Khorassan, 3,000; the central provinces, 3,000; Mazanderan, 2,000; Kerman, 2,000; and Georgia, 2,000; of a total value of 10,000,000 to 12,000,000 francs. The price of silk was exactly the same as it had been when Olearius wrote. Chardin adds that the product was increasing, and that the Dutch exported 600,000 francs worth from Hormuz to Europe.

In these calculations, of course, the nominal values do not represent the actual values, owing to the depreciation of gold.

At the end of the seventeenth century, most of the silk trade was in the hands of the Armenians, next in the hands of Persian, but now Russia controls the trade.

In 1711 Peter the Great entered into an agreement with these traders to export all their silk through Russia instead of Turkey, while the Armenians, by concurrent action, obtained from the Shah of Persia the monopoly of the Persian silk trade.

It was found, however, that they acted fraudulently, both towards the Russians and Persians, and the agreement with Russia as well as the monopoly were withdrawn in 1720. The Russians, after this, assumed the charge of the silk trade, induced to do so by the reports spread by an East Indian who was settled in Astrakhan. This individual informed Peter the Great in 1722 that the Gilan trade had assumed enormous proportions, and was on the increase, and that 1,200,000 pounds of Gilan silk had been exported to Turkey the previous year.

The value of this silk was given at 3,200,000 roubles, equal to $2,400,000. The Russians then floated their own ships on the Caspian, but the death of Peter, and the disturbances in Persia during the reign of Nadir Shah, put an end to Muscovite designs for a monopoly of Persian silk.

In 1738 several English merchants obtained the permission of Nadir Shah to open factories in Gilan, after they had concluded a commercial treaty with Russia in 1734, in which it was stipulated that all Persian silks for Europe and all English goods for Persia should pass by way of Russia.

Jonas Hamway, who was at the time manager of the silk trade in Gilan, reports that in 1744 Gilan produced 240,000 pounds of raw silk.

At the beginning of Hamway's directorship the price of raw silk in Gilan was $2 per pound, but in the following year the price rose to $5 a pound.

Gmelin reported in 1770 that the best silk was used for home manufacture, and that only the inferior qualities were exported. Every autumn Resht was full of Turkish, Persian, and Russian merchants, all buying silk.

The Turkish merchants paid in cash, and obtained their silk cheaper than the other merchants, who either bought on credit or gave goods in exchange. The prices in 1771, per 13 pounds weight, were, first quality, $12.50; second quality, $10; third quality, $8.25.

The last statistical notices of the silk product of the Gilan, thus far given to the public up to recent times, are those of Frazer, the English traveler, who stated, in 1822, that the average silk production of Gilan was 780,000 pounds per annum. He added that one-third of this quantity went to Russia, one-third to Turkey, and one-third was retained in the country for home manufacture.

The above statistics are summed up in the following table:

Authority.	Total produce of Persia.	Product of Gilan.	Price per pound.	Quantity used for home manufacture.	Quantity exported.	Remarks on quantity exported.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*	
Olearius, 1638	2,808,000	1,728,000	$0 50	216,000	2,592,000	None exported to Russia.
Chardin, 1669	4,320,000	2,160,000	50	....	....	Very little exported to Russia.
Hamway, 1738	....	....	2 00	....	....	All exported to Russia.
Hamway, 1744	....	240,000	....	....	....	
Hamway, 1745	....	....	5 00	....	....	32,000 pounds to Turkey—rest Russia.
Gmelin, 1771	....	....	*80	....	....	
Frazer, 1822	....	780,000	....	260,000	520,000	One-half to Turkey, one-half to Russia.
1883	608,000	497,000	*1 44	202,000	406,063	All but 3,000 pounds goes to Russia.

*Average.

It will be seen from this table that the annual product of silk at present is one-seventh of what it was in the time of Chardin, in the middle of the seventeenth century, and that the average price is now three times greater than it was then, and about one-quarter of what it was in 1745, when the English held the silk monopoly of Gilan.

On coming now to a more particular investigation of the silk product of Persia at the present time, we find the following results:

The silk-producing districts of Persia are Khorassan in the east; the provinces lying on the southern shore of the Caspian sea and north of the Elborz range, named Gilan, Mazanderan, and Astrabad; the middle province of Persia, forming a district between Kashan, Yezd, and the north of Fars, with Ispahan as a central point, and Azerbaijan in the extreme northwest. The exact quantity of the silk product of any of these districts can be stated with certainty.

But the following figures, obtained from reliable sources at Teheran, are, I believe, not far from the truth, as far as regards the silk which enters into trade. In Gilan and Mazanderan nearly every family rears silk-worms, and much of the silk thus produced does not come into the market at all, being manufactured by the women of the family into coarse stuffs, used for shirts, trousers, kerchiefs, and the like; while in the other district, where the silk produce is less important, every silk-grower also retains a certain quantity of silk for domestic use.

Of the quantity of silk which does not enter into trade nothing can therefore be satisfactorily ascertained, but I should estimate it at a quantity equal to 10 or even 15 per centum of the amount which enters trade.

The raw silk of Persia is divisible into three qualities:

First, is the Abrishum—that is, silk of superexcellent grade.

Second, is the Gurûk (a corruption of the word käkerû).

Third, the Lâs.

The first quality is divided into different numbers according to fineness of texture, gloss, color, &c.

In this connection might be added the fact that the Russian naturalist Gmelin, who visited Gilan in 1770, speaks also of three qualities. Chardin, under date of 1669, mentions four, viz: Shirwâni, the worst quality, called Ardash in Europe; Kharoârî, uneven, poor, and called in France Leghian (a corruption of the word Lahijân), a town of Gilan; Kedkhodâpesand, a medium quality, used in Persia for home manufacture, and Shárbâfi, the best wearing silk used for the silk stuffs of Yezd and Kashan.

All the four qualities mentioned by Chardin still exist, but they are, however, only different *kinds* of the Abrishum quality, rather than entirely distinct varieties.

Chardin ignores the silks called Guruk and Las. At the present day the people distinguish the various sorts of silk under the names of *Alâgbandi* silk, which is the finest quality used for sewing silk, trimmings, laces, ribbons, &c.; of *Shárbâfi*, which is employed at Ispahan, Kashan, and Yezd, for weaving curtains, carpets, and bed covers, bathing cloths, kerchiefs, &c.; of *Pârchehbâfi*, used for weaving high grade piece goods in Khorassan; and of Shirwâni, which is an inferior quality of silk, mixed sometimes with Gilan silk for coarser piece goods.

But all these are only different varieties of those going under the general title of Abrishum silk. Most, and indeed nearly all, of the *inferior* qualities of Persian silk are exported, while of the best quality only about one-third is sent abroad. In Gmelin's time only the third grade of silk was exported to Russia, because, as he says, good silk workers did not then exist in Russia.

In Gilan and Mazanderan the silk is collected at the end of May and brought to market in the months of August and September; but in Khorassan and the other districts of Persia the silk-worms mature later and the raw material is collected in June or July. Khorassan produces yearly about 16,250 pounds of raw silk. The centers of the Khorassan silk trade are Sabzvar and Nishapur, places lying under 36° north latitude and 3,000 to 4,000 feet above the level of the sea, on the northern confines of the lower salt deserts of Central Persia.

The Khorassan silk is generally good, and is rolled in skeins of 30 to 31 inches in length. It is purchased at present at Sabzvar at the rate of 5 to 14 tomans* per shahmonn of 13 pounds. None of the Khorassan silk now reaches Teheran. A small quantity is sent to Yezd and Kashan, some is bought by Russian traders and exported from Benderigez, the port of Astrâbâd on the Caspian, but most of it is used for home manufacture in piece goods.

Some years ago, when the silk product of Khorassan was twice what it is now, much of it reached Teheran, and large quantities were exported to Russia. More recently many of the silk-growers of Khorassan have taken to opium-growing—hence the great falling off in the production of silk.

It is but a few years since Khorassan produced 40,000 pounds of silk per annum.

The product of the Caspian provinces is generally divided into that of Gilan and that of Mazanderan, the latter including also the product of Astrabad. The Gilan silk is the best which Persia produces.

On account of a disease of the silk-worm, the product for the last thirteen or fourteen years has been comparatively slight. Last year, however, showed a decided improvement, and this year the results will be still greater.

Last year's product amounted to about 7,000 bundles (a bundle of raw silk in Gilan is called fardeli) of fine Shamans,* equal to 65 pounds each. A bundle weighing 65 pounds at Resht weighs when it reaches Teheran only 61.75 pounds. This loss of weight arises from the fact that in the humid climate of Gilan the silk is more or less damp, while it loses its moisture in the dry atmosphere of Teheran.

The total product of raw silk which entered trade from Gilân in 1882 was 432,250 pounds. It is rolled in skeins of 20 to 21 inches in length, and is sold at Resht, Lahija, Fumen, and other towns of Gilan, at the rate of 12 to 14 tomans per shahman of 13 pounds, the toman representing about $1.60 American currency. The Gilan silk is occasionally mixed with Shirwân silk from the Caucasus, and then sent to Teheran.

A large part of the silk of Gilan is manufactured at Resht, the provincial capital, into sewing silk, and at other places of Persia into trimmings, laces, fringes, cords, and similar stuffs. This is called *Alagbandi* silk.. The sewing silk, when ready for use, and dyed of different colors, costs at Resht 16 to 18 kraus per pound, equivalent to $2.56 to $2.72.

Only the best silk, valued at 14 tomans per thirteen pounds, is used for this purpose, about 50 per centum of the original price being thus added for cleaning, dyeing, twisting, &c.

About 20,000 pounds of silk are annually converted into sewing silk.

---

*The tomân is about $1.60.

The finest quality of Gilan silk is produced in the neighborhood of Lahijan, particularly in several villages belonging to a certain Mirza Mohammed Ali Khan, who has been able to command for some of his fine silks the sum of 330 krans per 13 pounds weight, equal to $4.50 per pound. The silk product of Gilan may be greatly increased. The greater part of this silk goes to Russia from Enzeli (*vide* export list).

The silk product of the adjoining province of Mazanderan amounts to about 35,000 pounds per annum. This silk is only of medium quality, rarely costing more than 10 tomâns per measure of 13 pounds. It is sold in bags weighing 78 or 65 pounds each. But little of the Mazanderan silk is exported to Russia from Benderigez, and that is generally improved by an addition of Gilan silk. Some of it goes to Kashân and Ispahân by way of Teheran. There it is combined with that of Kashan and Yezd, and manufactured into curtains and similar textile fabrics, such as Shârbâfi piece goods.

The center of the Mazanderan silk trade is Barfûrush. This branch of Persian silks is susceptible of large development.

The silk product of the central districts of Persia amounts to about 13,000 pounds per annum. This silk is poorest in quality, and has never been exported, being used altogether for home manufacture. But the amount now raised could hardly be increased, as the great scarcity of water existing in these districts interferes with the culture of the mulberry plantations.

The silk of Azerbaijan amounts to about 32,500 pounds per annum, and is raised in the lower lying districts of that province.

I am informed that the highest altitude at which silk-worms thrive in Persia is 6,500 feet above the sea-level.

Nearly all of the Azerbaijan produce is exported to Russia, and it is of inferior quality.

In summing up the results of the above facts we find that the product of raw silk in Persia may be tabulated as follows:

AMOUNT ENTERING TRADE.

	Pounds
Khorassan	16,250
Gilan	432,250
Mazanderan	35,000
Central provinces	13,000
Azerbaijan	32,000
Total	529,000

Add to the above 15 per cent., which remains in the country for home manufacture, and we find the total annual production averages 608,000 pounds.

The value of the silk which enters into trade may be computed as follows:

	Krans
Khorassan	100,000
Gilan	4,322,500
Mazanderan	189,000
Central provinces	60,000
Azerbaijan	150,000
Total	4,821,500

Say, for this year, 5,000,000 krans, amounting, at present rates of exchange, to $863,000.

The export of silk for the year 1881–'82, taken from the official statistics of the Persian custom-house, is as follows:

THE PORT OF GILAN.

	Pounds.
Abrishum from Enzeli	32,922
Abrishum from Benderigez	9,796
Abrishum from Azerbaijan	21,000
Abrishum from south of Persia, approximate	3,000
Total Abrishum exported	66,718
Inferior qualities from Enzeli	137,516
Gurûk and Las from Benderigez	97,219
Gurûk and Las from Azerbaijan	104,613
Total inferior qualities exported	339,345
Total quantity of silk exported	406,063

We see that the total quantity of silk exported amounted to 406,000 pounds; 123,000 pounds of the quantity which entered trade were thus used for home manufacture, or, adding the quantity which did not enter trade, we find that 202,000 pounds have been so used, being about one-third of the total product. This coincides with what Frazer noted in 1822, viz, that the growth of silk in Gilan amounted to 60,000 shahmans, of which 20,000 were exported to Russia, 20,000 to Bagdad, and 20,000 were retained for home manufacture.

Considering that all the Lâs is exported and that 339,000 pounds appear in the export table as inferior qualities, and that we may consider 320,000 pounds as Lâs, we are able to calculate the quantity of Lâs in every hundred pounds of good silk. We have 320,000 pounds of Lâs out of 529,000 pounds of silk, or 60 pounds of Lâs for every hundred pounds of silk.

Of Abrishum, or the first quality of Persian silk, 190,000 pounds entered trade and 67,000 pounds, equal to 35 per cent., were exported.

It is just to add that for various reasons there has been a tendency for several years to give less attention to silk culture and more to the raising of opium.

The adulterations which have gradually entered into the packages of opium prepared for export have, however, somewhat checked the demand for Persian opium, and effort is again turning in the direction of silk culture, which only needs encouragement to assume proportions larger than for many years.

Among the gentlemen to whom I am indebted for assistance in collecting these facts I should mention General Schindler, and other gentlemen connected with the Persian service, and also our efficient dragoman, Mr. A. B. Keün.

S. G. W. BENJAMIN,
Consul-General.

UNITED STATES CONSULATE-GENERAL,
Teheran, September 3, 1883.

SILK CULTURE IN SYRIA.

REPORT BY CONSUL ROBESON, OF BEIRUT.

The silk interest of the United States, according to the last returns, is fast becoming one of great importance. Thinking that a report on the silk production of Syria might be of interest to the silk-growers and manufacturers in America, I beg to submit the following report, compiled from data collected from the principal manufacturers in Syria, for the year ending March 31, 1882.

The quantity of silk-eggs reared annually in Syria is about 650 pounds. The amount of eggs referred to yields, on the average, 6,875,000 pounds of cocoons. The usual price of a pound of cocoon is 30 cents, giving a total value of $2,062,500. The above-mentioned quantity of cocoons produces 572,916 pounds of silk, the value of which, per pound, at the average rate of $5 each, gives the total of $2,864,580, being the gross sum that Syria gets annually by her silk produce. The cost of fuel and the miscellaneous expenses amount to nearly $98,484, and the interest on the capital invested at the rate of 6 per cent. per annum is about $82,500. In Syria there are at present 95 silk factories run by steam. In these factories there are 6,500 reels or basins, which give employment to some eight thousand men, boys, and girls. The wages paid to each laborer vary from 8 to 26 cents per day, according to the amount of silk reeled by the same. From best information, the total amount of wages paid to workmen of all descriptions is $172,726.

About 15 per cent. of the silk is used in manufacturing silk and satin goods in Syria; 85 per cent. is shipped principally to Lyons, in France, where the silk demands ready sales at good prices. One per cent. export duty is imposed on all silk exported from Syria.

Some years since the native silk-worms, owing to their poor quality, were given up and Candian and Japanese silk-eggs were imported, which did not prove satisfactory; then eggs were brought from Corsica, which have proved more successful.

Silk-growers of late have devoted considerable time to the examination by microscopical instruments of the eggs intended for use in the next year before they begin to feed the worms; this precaution has saved a great deal of trouble and expense. The rearing of silk-worms has become almost general along the Lebanon Mountain from Sidon to Tripoli. The mulberry tree has, to a great extent, replaced the olive groves, and the whole side of the mountain facing the Mediterranean is terraced wherever any soil can be found and mulberry trees planted. Great pains are taken in plowing and putting the mulberry fields in good condition in October and November of each year.

On or about the 1st of May all the silk-eggs kept by farmers or landlords in the littoral towns are sent to the mountain villages and convents for the winter on account of the cold weather reigning all the year round in those high regions. If the eggs were to be left in the plain, where the climate is warm, they would hatch in the heart of winter when no mulberry leaves can be found for their maintenance. Early in March the mulberry trees begin to shoot forth their leaves, and the silk-eggs are then brought back down from the mountain to the plain.

The first thing to be done by those who rear the silk-worms is to place the eggs in a well-closed room, where a wood fire is kept burning, for about three days, for heating it until the eggs show signs of life. The operation is termed by farmers "fumigating the grains," which is really a smoking process. The young worms are then spread on large round trays made with willow sticks and placed in huts built up with reeds and bulrush mats, divided into several compartments of two or three stories. The worms are then fed with mulberry leaves cut up very small. After eight days the worms begin to moult, when they stop eating for the first time. In hot weather they fast about a day; if the weather is cool they continue to fast for three or four days. After the first moulting, the worms being then strong enough, the mulberry leaves are given them whole. Silk-worms fast four times, and in each time they change and cast off their skin. The period of time comprised between each moulting is about eight days. After nearly fifty days, to commence from the day in which eggs are hatched, the silk-worms manifest restlessness and begin to climb up on the reed walls of the hut, on the sheaves of leafy branches which farmers place in the huts for that purpose, or on anything they find in their way.

After laying the foundation threads, which resemble the cobweb of a spider, the worm (then about three or four inches long) weaves the cocoon with which it covers itself entirely up. After this the cocoons are gathered and sent to factories to be heated by steam for the purpose of killing the worm, which has then the form of a chrysalis. If the latter were to be left alive, it would in a very short time tear up the cocoon, spoil the same, and fly out, metamorphosed into a perfect butterfly. Once the chrysalis is dead the cocoons are dried up and stored for spinning in the factories according to the latest improved system of reeling. The old native way of spinning is now entirely abandoned, as it produces a thick coarse thread of varying size, unfit for European looms.

Immediately after the crop is gathered, those who intend to rear silkworms in the next year select the best cocoons and keep them apart. When the butterflies come out of their silky shells they unite, and every female lays about one-fourth dram of eggs.

People gather these eggs, store them in square linen bags, and send them to the mountains for the winter, to be used in the following year.

JOHN Q. ROBESON,
Consul.

UNITED STATES CONSULATE,
Beirut, *September* 1, 1883.

THE SWISS SILK INDUSTRY AT THE ZURICH EXHIBITION.

REPORT BY CONSUL BYERS, OF ZURICH.

The National Exhibition at Zurich, Switzerland, again forces on public attention the importance and the growth of silk manufacture in this country. Silk weaving is, in fact, the foremost industry of Switzerland, ranking only below agriculture.

It is noticeable, however, that the industry is confined to a few central points, such as Zurich, Basel, Winterthur, Horgen, and Thalweil, with a few looms scattered here and there over the cantons of Argovie, Berne, Lucerne, Schwyz, Zug, and Unterwalden. These outside cantons work almost wholly for the large centers of Zurich and Basel, the former city producing mostly silk piece goods, and the latter only ribbons. The manufacture of silk stuffs at Zurich dates back over three hundred years. In all this time it has stood as a main support of agriculture, and for the reason that the looms have usually stood in the houses of the farmers, and not in factories. In short, the farmers' wives and daughters have done the silk weaving during the long winters, and on idle or rainy days in summer. Without the additional aid of the silk looms, hundreds of the farmers in the silk districts would long since have succumbed to poverty. The farmers' wives work harder, and in some seasons possibly earn more money than the men do. The result of combining silk weaving with farming has been, in canton Zurich at least, that the peasants' homes present an appearance of neatness, of content, and of being "well to do" that is not to be met with elsewhere in Europe.

Of late years, power looms have been introduced into Switzerland, as at Lyons, in France, and grave fears have been entertained that the result would be disastrous to hand looms and to the peasantry engaged in weaving. It is believed that one of the results of the present exhibition will be to prove that these fears were groundless. Certain silks, and especially the finer, can always be made better by hand than by power looms. Hand looms can change patterns to suit fickle fashion easier than power looms can, and in bad seasons, or in times of crises, hand looms can stand idle without bankrupting their owners, and can resume work on an hour's notice. Weavers who work between times—or just when they will, as opportunity allows—can work cheaper than weavers with long hours and hard, steady employment. Again, they are not interfered with by any of the rules of the factory laws. They can work early, or they can work late—the old can work, or the children can work. They are a law unto themselves. The advantage of *power* looms, however, especially as to cheap power and enormous production, are not to be underestimated; but it is believed that their work must be confined largely to cheaper goods and to cheap specialties. Americans are testing this.

An idea of the importance of the silk industry in Switzerland may be obtained when it is remembered that not less than sixty thousand people are engaged in it, and most of them in their own houses. Two years ago statistics showed that Zurich alone had 33,000 looms, of which 3,000 were power looms. At Basel ribbon industry occupies 6,300 looms, with 12,000 workmen. About 10,000 of the looms working for Zurich are in other cantons. The total silk-stuff production of the country reaches well on to $17,000,000.

Less than one-third of the products of the Swiss silk looms goes to the United States, paying an ad valorem duty there of 50 per cent. The totals shipped to the United States during the last twelve years were as follows:

	Francs.
1871	42,928,017
1872	40,760.941
1873	27,060,929
1874	25,083,566
1875	23,401,405
1876	26,613,469
1877	26,922,791
1878	27,601,539
1879	37,374,245
1880	40,414,646
1881	32,984,958
1882	45,030,630

The total exportation of silk manufactures from Switzerland in the year 1881 amounted in pounds, as follows:

	Pounds.
Silk stuffs	2,304,000
Ribbons	3,930,000

There are forty-one exhibitors of silk at this national exhibition out of nearly one hundred silk manufacturers. The reasons for so many withholding their wares are not easily understood. There is, however, a growing feeling that too many exhibitions are set on foot, and that the costs of exhibiting are entirely out of proportion to the benefits gained. There is, too, universally, more or less dissatisfaction with the action of juries as to premiums. This accounts, too, for the fact that many who exhibit wares do not enter them for prizes at all. A, B, and C exhibit wares equally good; B gets the prize, simply because somebody *must get it;* result is, A and C have had their trouble, their loss of time, and their expense for nothing, in fact worse than nothing, because the public will say they exhibited and *failed.* It must not be forgotten that most of the wares usually exhibited are made especially for exhibition, and hence are not fair samples as to cost, workmanship, or taste. It is the best *show* that takes the prize usually. The biggest ox exhibited gets the premium, though he is the *only* animal fit to slaughter out of an exhibitor's whole herd. Good averages go for nothing at exhibitions, and it is little wonder many manufacturers fail to see any advantages in them.

At this Zurich exhibition silk has properly been put in the leading group, although the exhibitors were not competitors for prizes, and the show of silks of every conceivable character is possibly the finest ever made in this country. Perhaps the most prominent of the silk exhibitors is the firm of Schwarzenbach-Landis. His magnificent case or exhibiting pavilion is the showiest one used for silks in the whole exhibition. It contains not less than thirty different kinds of silk of rarest beauty and workmanship. The Jacquard silks, representing Alpine roses, rosebuds, Edelweiss, &c., are the admiration of the best experts. Each of these flowered patterns is in twelve colors and required 14,000 in their production. The cost was from 60 francs to 70 francs per meter even in this land of cheap labor.

In general the exhibit of Mr. Schwarzenbach proves what a dangerous rival Lyons has in Zurich as to the production of some of the finest articles known to the trade. He has in his factory, in addition to an enormous number of power looms, at present not less than 100 of the heaviest Jacquard looms, with 1,000 to 1,200 crochets. He is also experimenting with some 50 looms in the production of velvet.

The firm of Stehli Hausheer & Sons also presents some magnificent specimens of silk, and especially of delicate coloring, some thirty of their exhibited patterns showing tones of the same color running into each other as delicate and varied as the hues of the rainbow. This exhibit of silk coloring has proved to be one of the great attractions of an exhibition rich in novel, beautiful and useful things.

Another silk exhibit most worthy of attention, because it is unusual, is that of Caspar Honegger. It is an exhibit of silks colored in the piece, and among them the most beautiful patterns. This firm produces not less than 100,000 yards per week of this piece-dyed silk. It is woven here and sent to Lyons for dyeing and finishing—not that the Zurich dyers and finishers could not finish this production themselves, but because they are busied with other methods.

Another of the Zurich specialties is silk bolting cloth. In this Zurich is without competition. For this article her weavers enjoy a world-wide reputation, and it is about the only silk article that seldom varies in price or quality. It requires the most skilled of weavers, and such are never out of employment. The greatest exhibitors and producers of this silk bolting cloth are Henry Pestalozzi, Reiff Huber, Schindler-Escher, Homberger Brothers, Heidegger & Co., and Dufour & Co. The extreme fineness of this beautiful web may be imagined when we know that 3,844 holes or pores may be counted in a single square centimeter of the finest grades.

The ribbon manufactures of Basel, great as this branch of the silk industry is, have made but few exhibits. The few made, however, show constant progress in an industry which for centuries Basel could call almost exclusively her own.

To what extent Switzerland may continue to furnish silk to the United States must depend, first, on the continuance of our high tariff, and, secondly, on our own manufacturers. The Swiss silk industry will scarcely go backwards permanently. Labor will always remain cheap. If power looms can make as good silk, and cheaper, than cheap hand looms can do it, then the Swiss, too, will adopt them, just as readily as they of late years have adopted other methods to their industrial advantage. In the past ten years they have had too many ups and downs to be permanently alarmed by any temporary falling off of exportations. The Swiss manufactures, like our own, are full of expedients. Their greatest future advantage is going to be in their combined methods of manufacturing, that is, in using both hand looms and power looms.

As has been shown, hand looms do and always will have certain advantages for weaving certain silks. In America, hand looms probably never can be much used, labor being too dear.

The Swiss consider, with right, the American tariff as their greatest obstacle to success. Unprotected competition they claim not to fear.

The American public, though long accustomed to buying its silks from Europe, will be ready enough to buy American silk whenever it is a certainty that the best and handsomest American silks are just as cheap as the best and handsomest silks of Zurich and Lyons. It is not probable that our duty on silks will always remain as high as it is now. Some of our best manufacturers do not think it desirable that it should. Let it be granted, then, that the tariff will be lowered to, say, 30 per cent. ad valorem, and that the price of labor in the United States remain about as now (it will not change materially in Europe), and that power-looms can be used for the same character of silk either in Europe or America, and to the same extent, can American manufacturers then compete with manufacturers of Switzerland? The probabilities are that they can compete, and even with a reduced tariff, but there are certain conditions:

1st. Methods must be adopted to compel European exporters of silk to the United States to pay the full duty, whatever that may be. It is not paid at present. It is even impossible under an ad valorem system. The opportunities for evasion, and the differences of opinion as to what values are, are too great. All duties can only be collected when they are levied by the pound. It is seldom that two men will agree as to the exact value of a thousand yards of silk in the market.

2d. American manufacturers must be able to convince the public that their silks are in fact just as beautiful and just as good as foreign silks.

3d. They must be able to deliver their silks after proving them to be just as good and just as beautiful, not only as cheap, but considerably cheaper than foreign silks. If not, the foreign silk will continue to be preferred as now; that is human nature.

Americans are much like other people—they will buy where they can get the best for the least money. Patriotism will not lead them to any other course, and time only can tell whether the conditions can be met. The enormous strides made by the silk industry of the United States in the last ten years, even allowing for the increase in population, leaves little doubt as to what our people can do with silk if they will continue as earnestly in the future as in the past. Certain exhibits at this exposition go to prove that the Swiss do not propose standing still as to this, the greatest of their industries. Every ingenuity and every art will be used to bring silk weaving and dyeing to a higher level. The manufacturers are alive to the danger of foreign rivalry, and will strain every nerve to overcome them. They have their eyes not less on the manufacturers of Lyons than on those of Paterson, knowing well that they have before them a desperate rivalry that may threaten them more in the future than it has in the past.

S. H. M. BYERS,
Consul.

UNITED STATES CONSULATE,
Zurich, September 8, 1883.

THE FRENCH WATCH TRADE.

REPORT BY CONSUL ROOSEVELT, OF BORDEAUX.

From the reports of the Chamber of Commerce of Besançon, it appears that the French watch trade is on the whole in a fairly flourishing condition. In 1875 the number of watches turned out (mainly from the department of Doubs) was 424,916, of which 139,624 were of gold and 285,292 of silver, while during the past year the total production was 493,943, of which 172,716 were gold and 321,227 silver.

The average value of a gold watch is estimated at 85 francs, and of a silver one 25 francs, which brings the value of the trade for 1882 to 22,711,535 francs; of this, about one-half may be apportioned for the labor.

The first quarter of the present year does not compare so favorably, showing a reduction of 5,164 gold watches, though the silver ones increased by 5,094.

The importation of foreign watches was 92,710 in 1881, and 76,922 in 1882, of which about one-half were supervised at the assay office at Pontarlier, the remainder being distributed through the offices at Bellegarde, Lyons, Paris, Besançon, Havre, Nice, Annecy, Bordeaux, Marseilles, Nancy, and Chamberg, including 397 watches made in other French towns.

The first commencement of the Besançon industry dates from 1793, when 411 skilled artisans from Neufchâtel were expelled from Switzerland and settled in the department of Doubs. At the present time the number of employers is between 190 and 200, while some 40,000 persons find occupation in watch-making, either in the shops or at their own homes.

GEO. W. ROOSEVELT,
Consul.

UNITED STATES CONSULATE,
Bordeaux, August 18, 1883.

THE SWISS NATIONAL EXHIBITION.

REPORT BY CONSUL BYERS, OF ZURICH.

The Swiss National Exhibition, opened in May last, is drawing to a close. Switzerland has been famous for its local exhibitions and fairs of every conceivable kind for the last half century. Every canton and almost every town has had one or more, and this one is the fourth general or nationl one. Most prominent men in Swiss towns have in some way been connected with the organizing and management of exhibitions. With so much experience on the part of organizers, and with plenty of material for exhibiting, it was right to expect that the Zurich exhibition would be an unusual success. There has been no disappointment. The press is unanimous in pronouncing this exposition the most complete national show, and the most perfect in taste and in detail, that has yet been organized in this country. Almost every department has been described with enthusiasm. Switzerland certainly has shown by this national show what her people can do; whether it is what they regularly do, is another question. It is fair to suppose that in all exhibitions the exhibitor puts his best foot forward. The Swiss prove no exception. There are 1,000 exhibitors here, many of whom, like the silk manufacturers, are not showing their wares for the sake of a possible premium, but to show, first, simply what they can do, and secondly, to aid in what, after all, must have been intended as a patriotic not less than an industrial festival; such, any way, it has proved to be. During the whole summer there has been connected with it festival after festival, congress after congress, meeting after meeting, excursion after excursion; in fact, the whole Swiss people seem to have abandoned themselves to having one summer's "big time of it," if they never have another. Zurich itself has been in holiday attire ever since the exhibition opened. As heavy expenses are connected with all these festivals, excursions, and ceremonies, one naturally wonders where the money comes from. It is more than probable that many a Swiss workingman will go on short rations sometimes this winter as a result of days of revelry during the past summer. It would be a curious calculation, and probably not an agreeable one to the Swiss, that should figure up all the financial gains of this exhibition and place them against all the individual losses in consequence of it. If thousands have been added to Swiss manufacturers' pockets, and to the pockets of hotel-keepers and railroad lines, wine-sellers, saloon-keepers, and public purveyors generally, where are those other thousands spent for travel, and extraordinary sight-seeing and dining, and wining a whole summer through by people who had but little to spend? All these things were not cheaper this summer in Switzerland than usual, nor were any great reductions made by transportation companies to people "bound to see the show." In fact, the reduction made by railroads was simply laughable, and overcrowded hotels were not likely to be cheaper than usual, though it must be said there is no public complaint of such "hotel gouging" as took place at the Vienna and Philadelphia exhibitions. These, however, were international exhibitions, where gouging becomes more of a practiced art.

Whatever the advantages or disadvantages of the Swiss exhibition may prove, one thing is certain, the show as a show was a tremendous success; that is granted even by those, and there were many, who opposed its organization.

There is a feeling creeping into men's minds that exhibitions are becoming too common and too frequent to serve any good end, considering the loss of money and time connected with them; a difficulty, however, that could be overcome largely by the organizing of permanent exhibitions, a remedy that in all probability will be adopted at an early day by all countries. One of the greatest advantages of permanent exhibitions is, or ought to be, in a ready opportunity to sell and buy duplicates of the articles exhibited. Exhibitors could thus shortly see whether exposing their merchandise is remunerative or not. The expenses would be reduced to a minimum, and the advantage of constant publicity and advertisement be secured. Manufacturers would do well to stop exhibiting articles made for the sole purpose of exhibition, and put on view only wares such as they are ready to furnish duplicates of on any man's order on short notice, and at reasonable rates.

As a rule, this is not the case. The price usually demanded for exhibition articles cannot be obtained, and when obtained even does not warrant the expense of manufacture, because of their exceptional character both as to quality and price.

It is a noticeable feature of the Zurich Exhibition that ordinarily the prices of articles exhibited or their duplicates are not exorbitant, and that many sales are made at rates that will aid in really introducing the articles to the public.

The Zurich Exhibition is gotten up with remarkably fine taste. The show-cases and pavilions inside the main buildings are themselves of exquisite workmanship and of great cost. Every group and every individual article was arranged with an idea to the most pleasing effect. If the individual exhibitor did not understand the advantages of harmonious display, there were enough committeemen and designers who did understand it, and nothing secured room and space that did not first receive their sanction. The grounds outside were as tastefully arranged as the exhibition inside, while the buildings, the pavilions, pagodas, &c., are marvels of architectural beauty.

The stranger entering the grounds is at once met with so much of the beautiful, so much that is in perfect harmony and taste, that a favorable impression of what is to follow comes as a matter of course. The Zurich Exhibition might have been very defficient in the articles exhibited, and yet, owing to the beauty and harmony of its sourroundings, would have passed for par-excellence of its kind.

All does not stop however with things beautiful to the eye. Strangers visiting the exhibition—and the attendance has been very large from all countries—have been astounded on seeing what the Swiss can do. I think the Swiss themselves are astounded; some of the groups, such as of watches, embroideries, silks, and machinery, are marvels of human ingenuity and perseverance.

SWISS VS. AMERICAN WATCHES.

It is my intention here to refer briefly only to such parts of the exhibitions as seem of more importance to Americans, with the exception of silks, concerning which I have already reported. A separate paper on school methods will also be prepared. We are competing with the Swiss first of all as to watches and silks. Of the latter they are making possibly $24,000,000 worth annually as against $34,000,000 worth made in the United States. Of the $38,000,000 worth of silk imported by us we receive about $9,000,000 worth from Switzerland. They, however, manufacture for export to all the world, and their articles embrace everything and every quality that can be made of silk, while American manufacturers so far are confined largely to trimmings, plain silk cravats, &c., and export none at all.

The Swiss watch-makers supply two-thirds of the watch trade of the whole world, or a representative value of one hundred millions of francs yearly, a sum to which American manufacturers have not yet aspired. The United States alone buys of Switzerland more than 13,000,000 francs' worth of watches yearly, notwithstanding the fright American manufacturers gave the Swiss at the Philadelphia Exhibition in 1876. It was feared here at that time that the Swiss would be driven from the field.

They were wise enough, however, to take advantage of the lesson taught them by Americans. They improved their own methods, they introduced machinery whenever machinery was most suitable to work side by side with hand labor, and while Americans, in their haste, stopped to crow over their success, and to "shout before they were out of the woods," the Swiss went steadily forward, and as statistics show regained all the lost ground. They are selling more watches to the world to-day than ever; they are now selling even to Americans more watches than ever, and it is noticeable that while millions of francs' worth of Swiss watches enter the United States, and are sold at a profit, in spite of our high tariff, no American watches are sold into Switzerland where there is no tariff at all.

It is also remarkable (American watches being as good as Swiss watches) that almost every American tourist of the thousands who go abroad annually brings home with him a good Swiss watch! Is not the difference of *price* between a good Swiss watch and a good American watch the cause of this? Does not, too, the fact that the Swiss have fully recovered their world-wide watch trade seem to prove that something more than machinery is required to make a first-class watch *cheaply?* If an article is not as *cheap* as a rival, though equally good, permanent competition cannot be thought of. Has not the whole history of watch manufacturing proved that dexterity of hand, long-practiced skill, and special knowledge are absolute requisites to the production of a good chronometer? The Swiss watch-makers possess these requisites; they inherit a talent for the business; they are taught to make watches as children, and they must attend special schools where their art is taught, after which they must serve apprenticeship. They are, besides, all specialists. There are more than sixty parts to a watch, and under the Swiss methods each of these parts is made by a separate specialist or master. A wonderful readiness ought to be gained by a man who, the year through, works ever on the same sort of a wheel or spring. That such a method is profitable or *best* for the specialist *himself* is not here in question. The only query is, can Americans with machinery only make fine watches as *cheaply* as the Swiss can with skilled workmen and a combination of machinery with hand-work? It is not to be supposed, of course, that the Swiss will not make use of machinery whoever may invent it and whenever it can be used to better advantage than hand labor. They are, as is well known, and as the exhibits of watch machinery at this Zurich Exhibition prove, *doing that to-day.*

The probability is that the American manufacturer cannot make a right fine watch at present as cheaply as his Swiss rival can do it. At least the market prices do not warrant any such supposition, and it is as well to look facts in the face, whether they are disagreeable or not. Even where our watches are as cheap as the Swiss, the *record* would certainly seem to prove them sometimes behind in *quality*. At the Paris Exhibition the Swiss watches ranked first, and at the Melbourne Exhibition, where watches were thoroughly and specially tested, the result was anything but favorable to us. The testing continued thirty-one days at the observatory, and with 500 points as a maximum standard the result showed as follows:

		Points.
1.	Switzerland (collectively)	500
2.	England	495
3.	Switzerland (collectively)	490
4.	England	480
5.	Switzerland (collectively)	480
6.	Unknown	475
7.	Germany	470
8.	Switzerland (collectively)	465
9.	England	460
10.	Switzerland	455
11.	England	450
12.	Switzerland (collectively)	445
13.	England	440
14.	Germany	435
15.	Waltham (watch company)	430
17.	Waltham (watch company)	420
25.	Waltham (watch company)	380
28.	Waltham (watch company)	365
33.	Waltham (watch company)	340
36.	Waltham (watch company)	325

In the above testing the Swiss average was 472.5 points as against 367.7 of the American.

That the above showing will be quite different in the near future is quite possible. American ingenuity, and the characteristic desire of our manufacturers to excel, and their constant energy and patience which at last force success, are not lacking here. The quickest and the surest road to success, however, would seem to be in taking advantage of the experience of our successful rival just as she has of late years taken advantage of ours.

We, too, can *combine hand labor* with machinery, even if it does cost us more; our tariff ought to supply that difference, and we, too, can establish proper *special schools*, and eventually we, too, will have the skilled experience and the art as well as our rival. Skilled watchmakers of the Jura mountains are as eager to come forward in the world as other people, and America possesses inducements that emigrants will not overlook.

To return to the exhibition proper, experts and judges of watches and watch-making machinery and material pronounce the watch department here to be the brilliant point of the whole exhibition. As a how it certainly is wonderful, and possibly could not be equaled in any other country. Watches of every conceivable pattern, style, character, quality, and price are exhibited; so, too, all the parts of different kinds of watches, clocks, chronometers, &c., and there would seem to be enough of the raw material on hand, in all stages of progress, to furnish a large factory. To name the list of exhibitors would be to name ome of the most famous watch manufacturers of the world. What progress this department shows since the closing of other exhibitions none but an expert could assume to declare. As a mere show of beau-iful and costly watches, as well as plain cheap ones, it certainly is emarkable.

Among the novelties in the watch and clock line exhibited here, and here are many, from a watch in a lady's finger-ring up to a mighty clock for a city tower, I noticed four silver watches hanging for weeks in a glass jar of water and keeping perfect time.

There are two hundred and ninety exhibitors of watches, of whom thirty-two exhibit only chronometers. Of these latter exhibitors sixteen are from Geneva, the remainder from Locle, Neuchatel, and Biel.

The following interesting table gives the value of watches and parts of watches exported to the United States since 1864 and including 1882. The lowest point was in 1877, when, for a time, it was believed American rivalry had crippled if not ruined the Swiss trade. Since then the exports to the United States have been steadily on the increase.

	Francs.
1882	13,238,429
1881	11,809,122
1880	10,143,813
1879	5,292,096
1878	3,985,716
1877	3,569,948
1876	4,809,822
1875	8,499,501
1874	12,119,941
1873	13,054,147
1872	18,312,511
1871	17,105,732
1870	16,512,162
1869	13,322,578
1868	10,469,725
1867	10,362,418
1866	13,093,468
1865	11,301,964
1864	8,477,192

SWISS EMBROIDERY.

The next department of this exhibition of special interest to Americans is that of embroidery, though here America figures only as a rich purchaser and not at all as a rival. On this single article the Swiss pay into our Treasury in the way of duties not less than seven to eight million of francs yearly, or a sum equal to their total exportations to us of this article in the year 1866. The history of the embroidery industry in Switzerland has been simply marvelous. It began with almost nothing some twenty-five years ago, and has now reached the proportions of one of the great industries of the world. This industry now employs 45,000 people at hand-work and 16,000 machines, doing the work of 500,000 hand embroiderers.

The following table exhibits the yearly amounts of embroideries exported to the United States alone:

	Francs.
1866	7,789,771.26
1867	4,930,161.58
1868	4,534,940.62
1869	6,280,680.73
1870	8,335,940.85
1871	11,809,409.30
1872	13,300,419.57
1873	13,879,379.84
1874	17,970,965.85
1875	16,822,134.52
1876	15,611,227.85
1877	17,098,857.49
1878	18,839,346.87
1879	21,451,936.82
1880	25,913,256.31

In 1882 the amount reached 28,432,728 francs. The industry is excellently represented at the exhibition, as are many of the machines for embroidering in operation. There are also fine exhibitions of hand embroidery from Appenzell and St. Gall. No better proof of the progress of this embroidering industry can be had, perhaps, than the case exhibited by Mr. Steiger, of Herisau. Mr. Steiger shows samples of fine Venetian lace, hand made, valued at 200 francs the meter. Side by side with this expensive and famous hand-made lace is a sample of *imitation lace*, made by machine, at a cost of only 50 francs the meter. None but an expert could detect the difference between the real lace and the imitation. Possibly the commercial world is near to seeing a revolution in lace making, at least as to cost of production.

The embroidery business has been a most thriving one for several years and manufacturers have grown wealthy at it, but there is a possibility of late that it has been overdone, and that too great production may have given it a serious blow. There is, too, a most lively competition in England and elsewhere, so that great ingenuity in devising patterns and arranging colors—for colored and flowered embroideries are becoming common—will be necessary if the Swiss are to remain as much masters of the situation in the future as in the past. The introduction of machinery has, of course, partially driven the hand embroideries to the wall; still, with embroideries as with watches and silk, the sure and profitable way will be found in the *combination* of *hand labor* with the work of *machines*.

MISCELLANEOUS MANUFACTURES.

Machines cannot yet do everything, and it will be a sad day for the world when they can. They have already, and more than once, in recent years been the cause of overproduction and consequent distress to the working classes.

The important groups representing cotton, woolen goods, machinery, house furnishing, &c., are all filled with attractive wares, but they are here passed over as not being of special interest to Americans. The department of machinery might do honor to an American exhibition. There were single exhibits in this department that attracted universal attention, and especially noticeable was an apparatus for making screws, connected with which was a contrivance for picking up the prepared iron, passing it down to a pair of iron fingers, which seized it and held it as if in a vise until the machine cut its threads, when it was chopped and instantly another rod picked up and presented to the cutter. Human hands could not do the work with more precision than is done by this apparatus for all sizes of screws. The department, in fact, is full of most novel and important machinery, and the wonder is that so much ingenuity and invention are to be found in a country where inventors have no protection in the shape of patent laws.

The "department of the chase" is also most interesting, containing, as it does, every species and variety of animal, bird, and fish peculiar to this country, prepared in the most artistic manner. So, too, the building devoted to ceramics, where the beautiful exhibition of Thun majolica and Lake Geneva pottery attract great attention.

The groups exhibiting electrical apparatus, telephones, &c., have been pronounced by judges to be very complete. I may here mention that the telephone is in very general use in Switzerland, especially in this canton of Zurich, and it is claimed that Zurich city uses more telephones than any city of like population in Europe. The "central station" system is in use, and the rates are about $30 to $40 per year.

The art department of the exhibition is in a beautiful building, erected for the purpose, in another quarter of the city. A very large percentage of the pictures are loaned out of private collections. Taken as a whole, the collection cannot be called extraordinary, though there are a few very valuable and beautiful paintings by Kaller, Alexander Calanio, Vautier, Stückelberg, and other artists bearing well known ames, while the great attendance, even with an extra admission fee, shows the pleasure of the public with Swiss art.

I remarked further back that many of the exhibitors were not competitors for prizes. Those who did compete cannot complain of not receiving enough, as 52 per cent., or more than one-half, received some testimonial in the way of prize or diploma. This would seem an extraordinary premium list, and must naturally raise the query, have prizes much value when so easily obtained, or rather when distributed in such numbers?

Financially speaking the exhibition has already been a success, and there doubtless will be no deficits to ruffle the temper of the few who got no prizes. The exhibition is in short a very great national success, of which every Swiss has reason to be proud.

S. H. M. BYERS,
Consul.

CONSULATE OF THE UNITED STATES,
Zurich, *September* 8, 1883.

AMERICAN TRADE WITH THE SOUTH SEA ISLANDS.

REPORT BY CONSUL CANISIUS, OF APIA, SAMOAN ISLANDS.

During the quarter just ended, June 30, only two American vessels of 312 tons arrived at Apia, with cargoes consisting principally of provisions and lumber, of the value of $24,230. During the previous quarter three American vessels arrived bringing cargoes of substantially the same kind, their values amounting to $41,795.50. This makes a total for the two quarters of $66,025.50. This half-year's imports into Apia compared with those of the same period last year shows an increase of $18,699.50, which, though it may not be called a large increase of trade, yet goes to prove what I have stated in a former report, that Samoa becomes from year to year of greater importance to the United States. There are already now, as before reported, two large American firms established at Apia, selling their goods not only at retail, but doing quite a large wholesale business. Besides these, the smaller houses also help to increase the imports, and the more Americans that establish themselves at Apia the more likely it is that the import trade from the States to this group of islands will increase. I anticipate that my report at the end of this year will show that the imports during the calendar year are greater than in any preceding year. The two larger firms are preparing themselves more and more to render a very considerable opposition to the two large German houses, which until recently almost entirely monopolized the trade of this group of islands, as well as of other South Sea Island groups. The two American establishments have recently purchased here several small vessels, which will be employed in the interisland trade, and if the beginning result in success we may reasonably conclude that the American commerce will increase at a very satisfactory rate.

For provisions, lumber, and a great many other things in demand in the South Pacific there is no cheaper or more convenient market than San Francisco. American capital and enterprise is all that is needed to make most of the South Sea Islands, in a commercial respect, tributary to the great city at the Golden Gate.

To bring this result about our Government could render the greatest assistance by granting the South Pacific Mail Steamship Company, whose vessels pass in sight of the islands, a reasonable subsidy to deliver the mail-bags destined for this group at Apia. This port is the great depot where goods are delivered and subsequently transshipped in small vessels to the other islands. The mail facilities between Samoa and the States are so poor that it sometimes requires months before a letter can reach San Francisco. A regular steam intercourse between here and that city would obviate this great drawback to American commerce in the South Seas. I am convinced that it would pay well to our country generally if the expansion of American business in the vast number of South Sea Islands were thus supported.

I have learned from a source which I deem reliable that the Imperial German Government would willingly grant a subsidy of 10,000 marks to the Pacific Mail Steamship Company to deliver the mails at Apia, if our Government would also grant a reasonable subsidy for that purpose.

Our commerce would probably soon predominate in the Samoa and Tonga Islands if our manufacturers of cotton dry goods knew how to please the taste of the semi-civilized or barbarous races which inhabit all the islands of the Pacific. The traders in the so-called "Line" islands—the Ellice, Gilbert, and Kingsmill groups—and even in the wilder Solomon and New Hebrides groups more to the west, would draw much of their merchandise from San Francisco, but English manufacturers produce calicoes cheaper and more to the taste of the South Sea islanders.

Even American merchants here are obliged to purchase their prints principally in Sydney, otherwise they cannot successfully compete with the Germans and English. This is a great obstacle in the way of a rapid increase in our commerce, which for geographical reasons should be predominant here. One finds that a large part of the provisions used here are brought from Australia, so that our merchants do not entirely control the market of the islands in that line, as one would expect. The two German firms here, the "Deutsche Handels- und Plantagen-Gesellschaft der Südsee Inseln zu Hamburg"—formerly J. C. Godeffroy & Sons—and H. M. Ruge & Co. occasionally dispatch a vessel to San Francisco, but only when they run short of provisions and are obliged to renew their stock as quickly as possible. So far one article alone remains entirely in the hands of Americans, and that is lumber. Our pines, of which the red is considered the best, are very well able to withstand the climate and the ravages of insects.

American merchants in Samoa state that they are forced to abandon the home dry-goods market because they are unable to find what is most needed and salable here. The high freight tariff on our railroads from the East is another bar to the extension of our export trade to the South Seas. Merchandise can be shipped from London or Liverpool to Sydney at a much less cost than from Boston or New York to San Francisco. The opening of the two new railroads from the East will doubtless cause a reduction in the freight, and as cause and effect are inseparable, business houses in Samoa may in future be able to secure a large quantity of goods in San Francisco at as low a rate as in Sydney. As far as dry goods are concerned I would suggest to our manufacturers of cotton goods to study the taste of semi-civilized races a little and examine samples of English patterns. The gaudier the colors the more they are in demand here.

Although I find that very substantial obstacles in the way of the expansion of American trade in these regions have to be overcome, still I have come to the conclusion that it will steadily increase.

A German firm here (Ruge & Co.) have lately dispatched a vessel to San Francisco for a cargo of provisions, &c. If their example is followed by the other German firms, we shall, with these and our own merchants here, soon have a brisk trade with Apia.

EXPORT TRADE.

he export trade from Samoa to San Francisco consists only of copra. No means are at my disposal to obtain accurate information as to how much it amounted to during the past quarter, for no invoices are certified to in this office. Copra is on the free list, and the ships generally collect a considerable quantity at the islands to the north on the homeward voyage. All I am able to say is that copra is now shipped in larger quantities to San Francisco than ever before.

I annex a statement of the shipping of the three nations represented by consular officers in Samoa.

THEODORE CANISIUS,
Consul.

UNITED STATES CONSULATE,
Apia, Samoan Islands, June 30, 1883.

Shipping from January 1 *to June* 30, 1883.

Nationality.	No.	Tonnage.	Value of imports.
American	5	1,001.82	$66,025.50
British	12	1,608.94	Not known.
German	42	7,008.69	Not known.

MEN-OF-WAR.

Nationality.	Name.	Tonnage.	Composition.	No. of crew.	No. of guns.	Remarks.
German	Carola	2,170	Iron	230	10	Ordered home.
American	Wachusett	1,500	Wood	180	7	Visited whaling station at Pagopago, thence to Tahiti and Callao.
German	Hyaene	489	Iron	77	4	Sailed to Tonga Islands.
British	Miranda		Iron	130	7	Visited Pagopago Harbor, thence to Fiji.

BRAZILIAN SUGAR FACTORIES.

REPORT BY CONSUL ATHERTON, OF PERNAMBUCO.

Referring to my dispatch of date of November 23, 1882, No. 89, I think it may be of interest to send copy of the advertisement of one of the sugar factories of Brazil; it is not known here if the shares are taken up. Another company will have one of their factories in operation in about three months. I shall report again when it is in operation. I believe it will have about 9 miles of tramway.

HENRY L. ATHERTON,
Consul.

UNITED STATES CONSULATE,
Pernambuco, August 14, 1883.

EMPIRE OF BRAZIL.

Imperial Brazilian guarantee for twenty years' interest on capital authorized to be called up is payable by the Imperial Government of Brazil from the date of payment into the company's bankers half-yearly by March 31 and September 30 in each year.

Issue of £300,000 in 15,000 7 per cent. preference shares of the North Brazilian sugar factories, limited.

(Incorporated under the limited liability acts, 1862 to 1880.)

The above shares are further entitled to participate in all surplus profits after 7 per cent. has been paid on the ordinary shares.

The interest guaranteed by the Imperial Government of Brazil for a period of twenty years amounts to £56,362 10*s.* per annum, payable half-yearly, equivalent to 6 per cent. per annum on £939,375 capital, and accrues on the amounts thereof authorized by the Imperial Government, to be called up from time to time, and is payable from the date of each payment to the company's bankers.

The company has been authorized by the Imperial Brazilian Government to call up £163,125 of capital, entitled to £9,787 10*s.* per annum guaranteed interest. The £163,125 is represented by 6,000 7 per cent. preference shares of £20 each, already issued and paid up in full, and by the 9,000 7 per cent. preference shares of £20 pounds each, now offered for subscription, on which £2 4*s.* per share is now to be paid up, making, together, £139,800, which, at 7 per cent., will absorb the above £9,787 10*s.* guaranteed interest. Payments on account of the ordinary shares, which receive no interest until the preference shares have received 7 per cent. in full, will complete the £163,135. Seven per cent. interest on the above £300,000 preference shares amounts to £21,000, leaving available for the purposes of the company £35,382 10*s.* balance of the guaranteed interest, on which it is intended to raise the remaining capital required, as hereinafter referred to.

DIRECTORS.

Charles Hampden Wigram, esq., 7 Leadenhall street, E. C., chairman, director of the East and West India Dock Company.

Richard Biddulph Martin, esq., M. P., 68 Lombard street, E. C., Messrs. Martin & Co., bankers.

Henry Farquhar, esq., 16 St. James street, S. W., Messrs. Herries, Farquhar & Co., bankers.

Frederick William Haigh, esq., Woodlands, Bickley, Kent, director of the London and Blackwall Railway Company.

James Strick, esq., London and Swansea, Messrs. James Strick & Sons, merchants.

Francisco Ferreira Baltar, esq., 4 Grafton street, Piccadilly, W., late of Messrs. Baltar, Oliveira & Co., Pernambuco, Brazil.

Fenelon Alcoforado, esq., 39 Mount street, Grosvenor Square, W., and Rio de Janeiro, Brazil.

The board of directors are prepared to receive applications for 9,000 preference shares of £20 each, being the balance unissued of the above 15,000 preference shares, of which 6,000 preference shares have already been subscribed and paid up in full.

Price of issue par, or £20 per £20 preference share, payable as follows: £1 per preference share, payable on application; £1 4*s.* per preference share, payable on allotment.

The balance will be called up as more capital is authorized to be raised by the Imperial Government of Brazil, but no call will exceed £5 per share, or be made at intervals of less than two months.

The option is reserved to shareholders to pay up in full on allotment, in anticipation of such authority receiving 7 per cent. interest on such prepayments from the dates of payment. The interest will be paid on the 1st of April and 1st of October in each year. The first payment will be made on the 1st of October next.

The following letter from his excellency Baron Penedo, the Brazilian minister in London, officially confirms the terms of the concessions, and certifies that the interest on the amounts, from time to time, authorized by the Imperial Government of Brazil, to be called up, is payable thereon by the Government from the date of their payment to the company's bankers:

"BRAZILIAN LEGATION, *London, June* 30, 1883.

"*To the Chairman and Directors of the North Brazilian Sugar Factories, limited:*

"GENTLEMEN: I have the honor to acknowledge the receipt of your letter of the 29th instant, in which you inclose the prospectus of an issue of £300,000 in preference shares of your company.

"In reply thereto, and in compliance with your request, I hereby declare that the statements in the prospectus relative to the authority of the company to carry on its operations in the Empire of Brazil, and to the guarantee of interest at 6 per cent. per annum, payable half-yearly in London for twenty years by the Imperial Government on £939,375 (8,350 contos de reis), accord with the respective imperial decrees. Such interest will accrue from the date of each payment to the company's bankers.

"I also declare that the statement relative to the payment of interest by the Imperial Government during and after construction is in accordance with the terms of the concession, and that the capital which the company is now authorized to call up is £163,125.

"The remaining capital is to be raised from time to time in accordance with the Imperial Government decrees, and the official communications which the Imperial Government will make to this legation in respect thereof.

"I have the honor to be, gentlemen, your obedient servant,

"PENEDO, *Brazilian Minister in London.*"

OBJECT OF COMPANY AND ERECTION OF FACTORIES.

The North Brazilian Sugar Factories, limited, has been formed for the purpose of carrying out concessions granted by the Imperial Government of Brazil for the erection and establishment of central sugar factories in that empire.

The object of the factories is to collect the sugar canes produced on several plantations at given points and there treat them by the best known appliances.

WASTE BY EXISTING SYSTEM.

By the present system employed in Brazil the canes are treated on each plantation by inferior machinery of imperfect design, and in consequence a large percentage of the sugar contained in the canes is wasted.

ADVANTAGES OF INTENDED METHOD.

The Imperial Brazilian Government, aware from their official information of this enormous waste in the primitive mode of dealing with the valuable and extensive sugar industry, decided, after mature consideration, to encourage the establishment of central sugar factories by this and other companies, to which the planters could sell their sugar canes, and this arrangement, though very remunerative to the sugar factory companies, is also advantageous to the planters.

SUCCESS OF EXISTING FACTORIES.

The great success of the central sugar factories established in Brazil has been demonstrated by the large amount of their net earnings as appears from the Anglo-Brazilian Times of 9th August, 1882, and the Journal do Comercio of 26th August, 1882, viz:

The Companhir Agricola de Campos Sugar Factory, which crushed 25,602 tons of canes, earned a net profit for the year 1881 of £13,431, being over 10*s.* per ton net profit

The Quissaman Sugar Factory, which crushed 62,798 tons of canes, earned a net profit for the year 1881 of £31,247, being about 10*s.* per ton net profit.

ESTIMATED PROFIT OF FACTORIES TO BE ERECTED.

From the accompanying reports of Sir Charles Fox & Sons and Messrs. Fawcett, Preston & Co., it will be seen that the specified capacity of the company's factories will suffice to grind 3,850 tons of sugar canes per day of 24 hours, but taking only 16 hours per day as the period for crushing and 120 days for the duration of the crop, the weight of sugar canes crushed during that period each year would be 308,000 tons, upon which, taking the average profit of 10*s*. per ton, the rate shown by the returns of the above factories in actual operation, there would result a profit from the company's factories of £154,000 per annum, or equal to over 14 per cent. on their entire cost; but this percentage should be considerably increased by the improved machinery and means of transport of the sugar canes which the company will possess.

COMPANY AUTHORIZED BY IMPERIAL GOVERNMENT OF BRAZIL.

The company has been authorized to carry on its operations in the empire of Brazil by imperial decree No. 8882, 17th February, 1883, and all the concessions acquired by this company enjoy the privileges granted by Imperial decree No. 8357, of the 24th December, 1881, which, among other things, includes the right of expropriating the necessary land for the purposes of the several factories, together with the use of the timber and other material existing in the various districts on the national lands which may be required for the construction of the works.

AS TO INTEREST GUARANTEED BY THE IMPERIAL GOVERNMENT OF BRAZIL.

By the terms of the same decree the Imperial Government of Brazil pays interest on the authorized capital expended during the construction of the works from the dates of its payment into the company's bankers. After the shareholders have received a dividend of 9 per cent. per annum, one-half of the excess over 9 per cent. will then revert to the Government until such time as any amount advanced on account of the guarantee shall have been repaid. It is not, however, anticipated that the Government will be called upon to pay the guarantee beyond the time necessary for the construction of the works. The earnings, as above estimated, amount to so much more than the guaranteed interest that the amount to be repaid will be comparatively small.

ADVANCES TO PLANTERS.

The imperial decrees contain the usual provision for the formation of a special fund for advances to sugar planters and suppliers of canes, if required by them, on the security of their crops.

NAMES OF CONCESSIONS ACQUIRED BY THE COMPANY.

The concessions acquired by the company are for the construction of fifteen centra sugar factories in the districts and of the capacities undermentioned, viz:

Tons of cane which each factory is to be capable of crushing per day of twenty-four hours.

Province.	District.	Tons.
Pernambuco	Itambe	200
Pernambuco	Pao d'Alho	200
Pernambuco	Nazareth	200
Pernambuco	Iguarassu	200
Pernambuco	Ipofuca	200
Pernambuco	Serinhaem	200
Alagots	Pilar	200
Alagots	Camaragibe	200
Sergipe	Japaratuba	200
Sergipe	Marojur	200
Sergipe	Sao Christavao	200
Rio Grande du Norte	Sao Jose	200
Ceara	Mecejana	250
Pernambuco	Sao Lourenco	400
Rio Grande du Norte	Ceara Mirim	800

Total crushing power per day, 3,850 tons.

STATEMENTS AS TO PRESENT GROWTH OF SUGAR CANE.

The company's agent and consulting engineers report that in each of these districts canes are already produced in very much greater quantities than will meet the full capabilities of the factories. Contracts have been made with upwards of 100 planters for an ample supply of canes for the factories, which will be first erected upon conditions very favorable to the company.

SUITABILITY OF SOIL FOR GROWTH OF SUGAR CANES.

The climate and soil of the northern provinces of Brazil, in which the above districts are situated, are particularly suitable for the growth of sugar canes. The locations of the factories have been decided upon by the Imperial Government after careful examination of the several districts, regard being had to the quantity of canes produced and the facilities for its transportation. The plans of the eight factories to be first erected have been approved by the Imperial Government.

SHARE CAPITAL.

The authorized share capital of the company is £700,000, divided into £500,000 in 25,000 preference shares of £20 each (of which it is not intended to issue more than the £300,000 herein referred to), and £200,000 in 10,000 ordinary shares of £20 each (the whole of which have been subscribed for by the contractors). The ordinary shares receive no dividend in any year until the preference shares have received 7 per cent. per annum.

DIVISION OF PROFITS.

All surplus profits, after both classes of shares have received 7 per cent. per annum dividend, are to be divided, half to the holders of preference shares and half to the ordinary shareholders.

It is intended to raise the remaining capital required for the purpose of the company by the issue of debentures or debenture stock at a lower rate of interest, for which the balance of guaranteed interest, viz, £35,682 10*s*., is reserved.

ADVANTAGES OF PREFERENCE SHARES.

Seeing that the preference shares now for subscription enjoy the advantages of—

1. Participation in the interest guaranteed by the Imperial Government of Brazil.
2. Dividend in perpetuity of 7 per cent. cumulative in priority to the ordinary capital.
3. In addition to such preferential dividend one-half of the surplus profits after 7 per cent. has been paid on the ordinary capital (the estimated dividend exceeding 14 per cent. on both the preference and ordinary capital).

The directors feel themselves justified in stating that the preference shares now for subscription possess unusual advantages in the sound character of the undertaking and in the prospect of highly remunerative dividends.

CONTRACT FOR WORKS.

Contracts have been entered into between Messrs. Reid, Bowen & Co., London and Pernambuco, and the company for the transfer of the above concessions, which have been so transferred to the company free from all encumbrances; for the complete construction and equipment of the 15 factories with land, railways, and other accessories, and the payment of the amounts required to pay interest on all sums paid up in advance of calls, as well as all expenses, for the sum of £1,089,250. These contracts provide for eight of the factories being completed by 31st March, 1885, and the remaining factories within 18 months after the approval by the Government of the detailed plans for them, and the authority is given to raise capital relating thereto.

AS TO ALLOTMENT.

Where no allotment is made the deposit will be returned, and if a smaller number of shares be allotted than applied for the surplus of the deposit will be applied to the payment of the amount due on allotment.

If any installment be not duly paid the allotment will be liable to cancellation, and payments previously made to forfeiture.

QUOTATION OF PREFERRED SHARES.

Application will be made in due course for a quotation of the preference shares in the official list of the Stock Exchange.

Bankers.—Messrs. Marten & Co., 68 Lombard street, E. C. Messrs. Herries, Farquhar & Co., 16 St. James street, S. W.

Solicitors.—Messrs. G. S. & H. Brandon, 15 Essex street, Strand, W. C.

Auditors.—Messrs. Price, Waterhouse & Co., 44 Gresham street, E. C.

Consulting engineers.—Messrs. Sir Charles Fox & Sons, 5 Delahey street, Westminster, S. W.

Engineers.—Messrs. Wilson & Dawson, 13 Dean's Yard, Westminster, S. W.

Secretary.—Mr. M. Adam, offices, 2 Tokenhouse Buildings, King's Arms Yard, E. C.

The memorandum and articles of association, translations of the concessions and decrees, the contracts and agreements, the original letter of his excellency the Brazilian minister, and the reports of Messrs. Sir Charles Fox & Sons and Messrs. Fawcett, Preston & Co. can be seen at the offices of the solicitors.

Prospectuses and forms of application can be obtained from the bankers and at the offices of the company.

Applications on the inclosed form, accompanied by the deposit of £1 per share, should be forwarded to Messrs. Martin & Co., bankers, 68 Lombard street, London, E. C., or to Messrs. Herries, Farquhar & Co., bankers, 16 St. James street, London, S. W.

Pursuant to section 28 of Companies Act, 1867, notice is given that contracts have been entered into as follows:

May 13, 1882, between the company and Messrs. Reed, Bowen & Co.

December 22, 1882, between Mr. H. J. Barker and Messrs. Reed, Bowen & Co.

January 8, 1883, between the company and Messrs. Reed, Bowen & Co.

March 25, 1883, between the company and Messrs. Dove Brothers.

March 30, 1883, between the company and Messrs. G. S. & H. Brandon.

April 3, 1883, between the company & Messrs. Wilson & Dawson.

June 19, 1883, between the company and Sir Charles Fox & Sons.

June 20, 1883, between Messrs. Fawcett, Preston & Co. and Messrs. Reed, Bowen & Co.

June 27, 1883, between the company and Messrs. Reed, Bowen & Co.

With reference to the contracts with the planters, exceeding one hundred in number, referred to herein, it is obvious that their number precludes the names and dates of them being set out, and subscribers will be held to have waived the right to their being so set out. They can be seen on application at the solicitors' office.

London, 5th July, 1883.

FORM OF APPLICATION.

To the Directors of the North Brazilian Sugar Factories, limited:

GENTLEMEN: Having paid to your bankers, Messrs. ——, the sum of £——, being £1 per share on —— 7 per cent. preference shares, of £20 each, of your company, I request you to allot me that number of preference shares, and I hereby agree to accept the same (or any smaller number that may be allotted to me) and to pay the balance due thereon according to the terms of your prospectus, dated 5th July, 1883, and I authorize you to place my name on the register of members in respect of the shares allotted to me.

Name in full, ——.

Address, ——.

Date, ——.

Signature, ——.

To be signed by applicant desiring to pay in full on allotment.

I desire to pay up in full on allotment, receiving 7 per cent. interest on such prepayments.

(Signature) —— ——.

The lists of applications will be opened on Tuesday, 10th inst., and closed on Thursday, 12th inst., at 4 o'clock, for London, and Friday, 13th inst., at 12 o'clock, for country applications.

HAWAIIAN SUGARS.

REPORT BY CONSUL M'KINLEY.

I have the honor to inclose herewith a list of questions placed before the board of trustees of the Planters' Labor and Supply Company, of this city, on June 13, 1883, together with the answers made thereto by a full meeting of the board on July 19 last.

As considerable inquiry has been made of late both by parties representing sugar interests in the United States and by a commission appointed to visit the Pacific coast to examine into the workings of the existing treaty of reciprocity between the United States and this kingdom, I have thought it probable that the inclosed information, coming from so reliable a source, would be of interest to the Department.

D. A. McKINLEY,
Consul.

UNITED STATES CONSULATE,
Honolulu, August 20, 1883.

Questions submitted by Ellwood E. Thorne, esq., of New York City, to the trustees of the Planters' Labor and Supply Company, of Honolulu, and answers given by board of trustees of said company.

Question I. Are Hawaiian sugars subject to artificial coloring?
Answer. No.

Question II. With their process of manufacture what is the usual and natural turnout as to color?
Answer. Nos. 6 to 16, Dutch standard.

Question III. What were the grades of Hawaiian sugars as per Dutch standard previous to 1876?
Answer. No. 6 to 20; No. 20 being washed sugar.

Question IV. What were the grades commonly known in the San Francisco market as Hawaiian sugars at the beginning of the treaty?
Answer. From 20, Dutch standard, down to 6.

Question V. What are the grades now sent to San Francisco?
Answer. Nos. 16 to 6.

Question VI. What was the saccharine strength of these sugars previous to 1876 as shown by the records of the Honolulu agents and the San Francisco agents?
Answer. Sugars were sold in open market for grocery grades and so polarized.

Question VII. Has muscovado sugar, meaning thereby brown or other unrefined sugars made in open pan and drained by gravity, ever been made in these islands; if so, to what extent, and when abandoned?
Answer. None for twenty-five years.

Question VIII. In what year was drying by centrifugals introduced?
Answer. 1852.

Question IX. In what year were vacuum pans introduced?
Answer. Before 1863.

Question X. In what year were double and triple effects introduced?
Answer. 1879.

Question XI. What are the grades, Dutch standard, turned out by open pans and centrifugal drying on the Hawaiian plantation since or before 1876?
Answer. Before 1876 a sugar 14 to 20; since, 12 to 15.

Question XII. Previous to 1876 were the sugars above No. 10 Dutch standard, or were they very low grades?
Answer. Above 10 as much as possible for grocer's trade.

Question XIII. Has not large crystal centrifugal sugar of saccharine strength from 84 to 96, made in the open pans or vacuum pans, been commonly known for years before the treaty, and varying in color from 16 to 20, Dutch standard?
Answer. Yes.

Question XIV. What effect as to color and strength has the introduction of vacuum pans or double effects had upon the previous production of the island sugar; has the effect been such as to change the sugar materially or to introduce into the ports of the United States a new article unlike former island products?
Answer. No.

Question XV. Have or have not these improvements in machinery tended to cheapen cost of production, and not change of grades to higher numbers, Dutch standard?
Answer. Yes.

Question XVI. Are there any refining or semi-refining processes used in the island plantation?
Answer. No.

Question XVII. Is lime used in making muscovado sugar?
Answer. Don't know.

Question XVIII. Is lime used in making centrifugal sugars?
Answer. Yes.

Question XIX. Is lime the usual defecant, and can its use be called a refining or decoloring process?
Answer. Lime is used everywhere, and it discolors sugar.

PRODUCTIVENESS.

Question XX. What is the average yield per acre of plant cane?
Answer. Estimated, 3½ tons.
Question XXI. Of first ratoons?
Answer. Estimated, 2 tons.
Question XXII. Of second ratoons?
Answer. Estimated, 1½ tons; very little cultivated.
Question XXIII. What is an extraordinary yield?
Answer. Six tons to the acre.
Question XXIV. What is the cost of production per pound?
Answer. Impossible to say.
Question XXV. Rates of interest?
Answer. Seven to ten per cent.
Question XXVI. Wages of laborers?
Answer. Seventeen to thirty dollars per month.
Question XXVII. Status of the labor market?
Answer. Labor always scarce.
Question XXVIII. Present inducements for extension or improvements on planta-n?
Answer. Not encouraging—very poor.
Question XXIX. Acreage of cane growing?
Answer. Not ascertained with any degree of accuracy; survey proposed.
Question XXX. Proportion of area of islands available for cane?
Answer. Cannot say.
Question XXXI. How many acres must be in cane to insure one acre ready for pping each year?
Answer. Three to one or one-third yield each year, differing according to location.
Question XXXII. What is the probable limit of sugar production and how long, th continuance of treaty, before such limit be reached?
Answer. Limit of production estimated about 80,000 tons.
Question XXXIII. What was the export of the islands previous to the treaty?
Answer. About 13,000 tons.
Question XXXIV. What was the cause of the increase since the treaty began or s confirmed?
Answer. Stimulus of the treaty and influx of capital principally from the United ates.
Question XXXV. On what basis are sugars sold in San Francisco?
Answer. Cuban centrifugal in New York and Manila in San Francisco.
Question XXXVI. How is the price made up?
Answer. On Manila basis, cost of ex. sup. Manila laid down in San Francisco 91° 1 10, Dutch standard. In New York cost of 96° per Cuban centrifugal.
Question XXXVII. Does the price include the duty?
Answer. Yes.
Question XXXVIII. Is it true that the purchasers in San Francisco pay the duty?
Answer. Yes.

DAIRY THRIFT IN DENMARK.

HE FORMATION OF BUTTER AND ITS PHYSICAL AND CHEMICAL COMPOSITION.

REPORT BY CONSUL RYDER, OF COPENHAGEN.

I have the honor to transmit a report from a lecture delivered by ofessor Storch, at the Royal Agricultural Society of this city, on searches on the formation of butter in churning, also on its physical d chemical composition, &c.

The lecturer remarked that these researches were originally comenced at his own instigation some years ago, but have since by degrees read themselves as a branch of Professor Fjord's experiments, to which e lecturer is now connected as chemical assistant. The materials for vestigation are for the most part obtained from these experiments, and the means for their being carried out are mainly to be attributed to sundry churning experiments which Mr. Fjord, a full year ago, caused to be carried out with cream which was churned, partly without previous cooling, and partly after being cooled to about 1° C., and then again warmed up to ordinary churning temperature. The results from these experiments were so peculiar that they did not admit of an explanation from the generally accepted theory of butter formation during churning. The different theories which have been propounded in the last forty years in explaining the churning process, are for the most part solely built upon simple theoretical views, and but few of them are supported by direct investigation of this process. Hitherto, however, a fully satisfactory explanation of the churning process has not been successful. The theories set up are more or less agreed upon on one point, namely, that the butter formation either solely consists in, or, at any rate, presuppose, an agglutination of the suspended microscopic fatty balls in the milk or cream. The digressions from the different theoretical opinions on the butter formation, are first made apparent by the explanation of several experiences ascertained in practice, such as, that the formation of butter does not similarly occur in all degrees of temperature; and that, under the same conditions, it may require a comparatively long time, even a great difference in time, to be accomplished. That again it takes place easier and more quickly in churning soured milk or cream than with fresh; also that the appearance of larger visible butter grains seems to occur suddenly. Until lately it was generally believed that the microscopic milk grains were encompassed by a close but exceedingly thin skin, composed of albumen (caseine), and this skin or membrane theory is still not given up by all physiologists. The hindrance to the butter formation was attributed to this membrane. The milk balls could not be brought to adhere together before it was removed, and this was obtained by the mechanical work during churning, which produced a friction of the milk balls one against the other. By this means the skins were gradually worked so thin that they burst, and when the cementing together could take place pretty equally with all the milk balls, the bursting of the skins would also occur at the same time, and consequently the adhering together of the milk balls, by which the immediate production of butter was to be explained (Romanet's theory). According to the opinions of others, the skins were dissolved by the souring of the cream or milk, and hereby the grounds were sought for the speedier formation of butter in the churning of sour cream or milk. The presence of the supposed membrane has, however, never been proved; all the later researches, on the other hand, have led to the results that it does not exist. Several newer churning theories go out upon this presupposition, and they attempt to explain the formation of butter solely by the adhering together of the milk balls; which explanation, however, is very imperfect and unsatisfactory.

The churning theory, which at present has obtained general approval and which on its appearance caused great sensation, is set forth by Dr. Soxhlet, of Vienna (1876). He observed, during his investigations of the nature of milk balls, that these maintained a completely regular ball of smooth surface, even if the cream or milk's degree of temperature were reduced to the water's freezing point, and he calculated therefore, very justly, that the fatty substance in the milk balls must find itself in a liquid (melted) state. First, after a cooling of 3° to 4° below the water's freezing point, did Soxhlet manage to bring the milk balls to stiffen, but the same result was obtained by him through shaking or churning the cream at the ordinary churning temperature (10° to 15° C.)

The milk balls thus received an irregular form, became partly non-transparent, and their surface was no longer smooth, as the milk's fatty substance's stiffening point, on the average, is several degrees higher than churning temperature (according to the lecturer's researches, between 15° and 25° C.); the milk balls must be found to be in a so-called "under-cooled" state in the ordinary churning temperature. Placed in analogy with that well-known physical phenomenon, that an "under-cooled" liquid, by shaking, immediately stiffens under the giving out of its contained heat, Soxhlet thus accounts for the formation of butter. By the mechanical movements during churning, the milk globules are made to stiffen, they receive an irregular form, and can now more easily overcome the resistance which the milk moisture (serum) offers to their agglutination. This takes place by degrees, the first-formed small lumps (conglomerates) of the milk globules unite themselves with the larger ones, or pick up fresh milk globules which stiffen by coming into contact with the conglomerates; the more voluminous these are, so much the more rapid is their growth, so much so, that at last they suddenly appear to show themselves like butter.

The most favorable churning temperature must, according to Soxhlet's theory, be that with which the milk globules most easily adhere together, and this must also give the greatest yield of butter. In practice, however, one has not yet arrived at the most favorable temperature for all occasions. As is well known, this disposition is somewhat different, according to the nature of the materials which have to be churned, and in such manner that soured cream or milk is churned at a higher temperature than sweet cream or milk, and the difference found in practice for the best churning temperature as relating to soured or sweet materials amounts even to several degrees.

An explanation of this choice, Soxhlet's theory does not appear to give. Neither does it appear to account for what becomes of the confined heat which must absolutely be set free with the stiffening of the milk globules.

The increase of temperature during churning, as known in practice, is generally attributed to the mechanical labor carried on during churning, as under ordinary circumstances it only amounts to a couple of degrees.

Direct investigation of these causes by Prof. Alexander Miller (1867) strengthens the adoption of these views. By churning water for half an hour, the temperature thereof increased from 15° to 19° C., although the temperature of the air was only 13° C.

Some observations made by the lecturer (Storch) some years ago when engaged in microscopic researches of butter formation during churning, caused him to doubt the correctness of Soxhlet's theory, and he therefore determined to put the churning practice to a closer investigation, not only by microscopic but by chemical means, for the purpose of deciding whether the milk's moisture (serum) of itself did not at the same time play a considerable part in this. The results from these microscopic researches, he had illustrated by a micrographic representation of the churning process in the form of divided drawings, carried out under the microscope with a magnified power of 700. He proved that the free-swimming milk globules in the cream or milk, by the shaking of the moisture or churning for a few minutes, united themselves into small lumps (conglomerates) of very different sizes, formed by the milk globules, agglutination; also that in these conglomerates were to be seen cavities filled with a peculiar light breaking moisture. While the churning continued for some minutes, these conglomerates increased considerably, but their physical build was of a somewhat different nature than of those previously investigated. They were mainly formed, not by agglutination of the small lumps of agglutinated milk globules, but by a conglutination of these, as between them, or rather round about them, was found a thin moist layer of some peculiar light breaking nature as before mentioned as being inclosed in the agglutinated milk globules, and this moist layer seemed to cement the small lumps together. With further continued churning, this formation goes on in the same invariable manner, and the difference between the investigations carried on at different periods of churning shows only a gradual increase in the size of the conglomerates, which by degrees become visible as butter balls. In practice the churning is stopped when the butter balls have obtained a proper size, generally 3 to 4 millimeters in diameter. This peculiar inner growth of the butter balls is only retained by them so long as they are not subjected to a pressure similar to that in the kneading of butter. When pressed together, then the structure is completely changed. The moisture layers are transformed to moist drops of extremely different size, and when a very thin layer of the kneaded butter is observed under the microscope, then it is no longer possible to notice the milk globules, but instead of these, an innumerable number of drops are plainly visible. It was by means of these microscopic researches that the lecturer was enabled to observe that the milk globules retained their melted appearance after their agglutination to the small lumps, and after the conglutination of these to larger conglomerates. The surface of the united milk globules was mainly smooth and quite transparent. When, on the other hand, the covering glass was firmly pressed against the milk globule conglomerates, which were placed for microscopic investigation, then the milk globules stiffened at once, received an uneven surface, and became non-transparent. This change in the milk globules aggregate condition by the pressure, must, in the opinion of the lecturer, be ascribed to the immediate contact with the glass mass, because in a similar manner he got the isolated milk globules in the cream to stiffen without any previous shaking thereof. When, however, a strong pressure of the covering glass was avoided against the microscoped object, it was not possible to observe any stiffening whatsoever of the milk globules in the conglomerates formed during churning. Whilst Soxhlet, nevertheless, has arrived at a different result, this may clearly be attributed to the fact that he has exerted a pressure upon the object which he was investigating under the microscope, and in this way he will always find the milk globules stiffened in the conglomerates formed in churning. In case the lecturer's observations are correct, then the formation of butter during churning cannot depend upon the stiffening of the milk globules and their consequent agglutination. But if it does not depend upon this, then it must be possible to churn butter at a heat temperature with which a stiffening of the milk globules cannot occur, or, in other words, at a temperature above the maximum boundary for milks' fatty substance stiffening temperature (25° C.).

Not alone from experiments made with small quantities, but also churning experiments with larger quantities of cream at the Ourup experimental dairy farm, confirmed this opinion. The lecturer divided one-fourth of a pot of cream into three equal parts, cooled the one to 0° and churned it at this temperature by shaking it in a closed bottle; the second part was heated to 26½° C. and churned at this temperature; the third part was heated to 45° C. and shaken in the same manner as the foregoing. In following the churning process with the microscope, it was seen that the formation of butter was normal, and in the cooled as well as in the part heated up to 26½° C., but was completed much sooner in the last than in the cooled. In the part heated up to 45° C. the milk globules also united, but dissolved here again to a liquid fatty layer. There was thus obtained, in this manner, no formation of butter.

Of the experiments made at Ourup farm, the lecturer described the following: The cream employed was scummed with the help of the centrifuge from fresh milk from new milking cows. The milk measured 28° C. when placed in the centrifuge; the scummed cream 18.3° C. The cream was divided into three equal parts—the one was heated immediately up to 29.5° C., and churned in a churn previously warmed to the same temperature, and which was carefully isolated with cushions filled with carded cotton. After the lapse of eight minutes the separation of the butter commenced, and increased during the following two minutes; the churning was continued still six minutes longer, then stopped, and the formed porridge-looking butter was removed on a fine sieve and laid aside for two hours in a cool milk cellar. The heat temperature at the close of churning was 28.8° C. There could be no talk of stiffening of the milk globules, which also the physical nature of the butter confirmed. After two hours' repose in the milk cellar the butter became somewhat firm. A slight pressure was now given to it, and after careful working of one and one-half hours with a spoon on the kneading board, it was so far united that the first kneading with a roller could be made. After another lapse of two and one-half hours, a second kneading took place and weighing, when a sample was taken for analysis. From this chemical and microscopic examination it was seen that a real formation of butter had taken place. The butter had the same structure as normal butter, but was intermixed with a large quantity of nicroscopic air bubbles, which the lecturer has seldom observed in normal churned butter. The chemical analysis will be given further on.

Another part of this centrifuged cream was cooled in a cooling mixure of snow and kitchen salt, remained therein to the following day, nd was then frozen to a solid mass, so solid that when assistant Lunde, who carried out the experiments, wished to remove a thermometer placed n the cream, the ball thereof stuck fast in the frozen cream. This was lowly thawed by being left in cold water and had a temperature of ° C., when the churning in a previously cooled churn commenced. The hurning was continued without interruption for 240 minutes (four hours) ntil the butter globules were formed, and notwithstanding that the hurn to the top was surrounded by finely crushed ice, the temperature n it yet rose to 12.8° C. The butter was of normal nature, threw off ery easily and fully its buttermilk in sieving, and allowed of being neaded immediately. The yield of butter was very good, and the butermilk remarkably well churned from it. (The analysis gave 0.44 per ent. fatty substance in the sample taken from the buttermilk.) The utter was in physical and chemical respect perfectly normal. (The nalysis is given further on.) These experiments prove that the milk lobules can be perfectly stiffened without the formation of butter beng therefore an impossibility.

The third part of the cream was churned at the normal churning emperature (12.5° to 14.4°C). The formation of butter was completed thirty-two minutes, and the yield of butter was but very little larger han with cold churning.

The lecturer then gave a fuller description of the microcsopic inner tructure of the butter. As the annexed drawing (drawing 3 and 4) lainly shows, the microscopic moisture drops in the butter are of greatly different sizes; namely, while some of them at a magnifying power of 700 will show themselves as relatively large drops, so large that they could cover one-sixth of the sight field; others, on the other hand, are so small that they could more properly be described as points. Whence arises this difference in the size of the drops? The before-mentioned formation of butter in churning will give this explanation.

With the milk globules mutual agglutination in a very short time occurs, filled with a moisture (serum), and these in the kneaded butter will show themselves as small pointed-formed pores. They come forward very distinctly when one looks at the outer edge of a thin butter layer under the microscope at a magnifying power of at least 400. If the covering glass is pressed somewhat strongly on the edge of the object, it will then be possible to eject all the larger drops, and the butter is shown as a closely packed mass of milk globules, the circular-shaped forms of which are plainly visible. (The microscopes of Seibert and Krafft, of Wetzlar, as well as Carl Zeiss, of Jena, are better adapted for these experiments than that of Hartnack.) The milk globules lie side by side as a stone pavement in the street, and between them here and there a moisture space is to be seen, either in the shape of a half moon or star-like, the latter bordered with three or four flat balls. The layer drops in the butter are caused by the previously mentioned moisture layer, which cements the small lumps of agglutinized milk globules. But in addition to these, some large-sized drops appear in all butter, which are, however, too large to admit of investigation under great magnifying power, and have therefore to be pressed out by the covering glass. They can, on the other hand, be investigated through a less magnifying power, but then the previously described drops are not visible. These very large drops arise from the buttermilk which accompanies the butter when it is taken out of the churn, and the whole of which cannot be expelled in the kneading. Their size and number in butter must chiefly depend upon the size of the butter balls in churning, and thus the larger the latter are so much the larger, although less in number, will also the drops of buttermilk be; while the number being increased and the size so much the more diminished, so much the less will be the butter balls at the close of churning. These buttermilk drops play a considerable part in butter, because it is these which for the most part regulate the taste and smell. The question next arises whether all these moisture drops (large and small) in the butter contain buttermilk, or whether this moisture, which tends to butter formation in churning, is not rather of another nature than of the buttermilk which is left behind in the churn. It was this question which originally led the lecturer to enter upon the chemical investigation on the transformation of milk-serum in churning.

Similar investigations of sweet milk or cream and of the products obtained from churning, namely, butter and buttermilk, the lecturer had commenced in 1876. His butter investigations, in order to demonstrate the difference between butter churned from sweet or sour cream, had then already been made in 1874, and the conclusions then arrived at of the nature of serum in butter were supported by the analysis of milk from the foreign chemi-physiological literature.

A comparison between that mentioned therein and the serum in the butter samples, which he had analyzed, brought him to the result that these moistures were of the same composition, and that the moisture drops in the butter only contained milk-serum (so called buttermilk). As the lecturer in the following year had frequent opportunities for carrying out minute analyses of milk, it was shown that the conclusions arrived at with reference to the nature of serum must be erroneous.

The inclosed moisture in the butter mainly contains no inconsiderably larger amount of albumen (caseine) and less of milk-sugar than sweet milk serum, even when the butter is churned from entirely sweet cream, and which will be shown by the following table:

[In 100 parts of serum.]

Description.	Average of—	Water.	Milk-sugar.	Albumen.	Ashes.
		Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
Of sweet butter	8 analyses	90.72	2.62	5.81	0.85
Of soured butter	11 analyses	91.41	1.28	6.39	0.92
Of sweet milk	33 analyses	90.78	4.54	3.90	0.78

It is shown from these figures that serum in sweet butter contains nearly 2 per cent. more of albumen but 2 per cent. less of milk-sugar than sweet milk serum, notwithstanding that the contents of water are the same in both, and for soured butter serum this difference is still greater. The investigated samples of milk and butter are due exclusively to Professor Fjord's experiments; that is to say, from the collected milk of larger stocks of cattle from different places in the country.

The several analyses demonstrate that the difference between the milk and butter samples reciprocally is but small. If one will not again entertain the belief of a membrane in the milk globules and attribute the larger contents of albumen in butter serum to such membranes, he must necessarily seek for an explanation in the peculiar separation of the cream or milk serum in the churning process, namely, in a rich caseine part which is introduced into the butter under formation, and a smaller caseine part which forms the buttermilk.

In order to determine whether this conjecture was correct, and in such case to demonstrate further what becomes of the cream serum under the churning process, the lecturer has carried out a number of widespread analyses of sweet milk, cream, butter, and buttermilk from Mr. Fjord's churning experiments, and thereafter by mathematical calculations to ascertain wherein the difference in the chemical composition of serum from cream (milk), butter, and buttermilk from all the investigated cases and experiments consisted. The first researches of a like character employed in such calculations had already been made by the lecturer several years back (1876), when he arrived at the interesting result that the difference in the chemical composition of serum from cream, butter, and buttermilk was due to a certain amount of water, albumen, and ashes, also that the bearings between these three articles in this difference was constant, or, in other words, that the difference had the same percentage of composition, at least in all the experimental trials when he had made analyses in 1876–'77. They merely contained on an average 92.45 per cent. water, 6.84 per cent. albumen, and 0.71 per cent. ashes, and that which the lecturer, for brevity's sake, would call caseine hydrate must be looked upon as a particular matter or chemical compound.

As an example, the result is given from one of the lecturer's analytical trials. From the analysis of cream (after 10 hours skimming in ice) and butter as well as buttermilk (the cream was churned sweet) it was found that the cream's butter and buttermilk's serum must be placed in the following respective connections:

One hundred parts cream serum = 1.156 parts caseine hydrate + 98.844 parts butter with serum.

One hundred parts butter serum = 31.082 parts caseine hydrate + 68.918 parts buttermilk serum.

However interesting this discovery was, the lecturer was prevented from following it up for the next two to three years, owing to his time being so fully taken up with experiments on the curdling of cow's milk. There was also, at the same time, another important problem for the lecturer to solve, namely, the methods for obtaining a more exact certainty of the contents of milk-sugar and albumen in milk and butter, as the quoted calculation of the difference in the chemical composition of serum rested for a great part on the figures obtained in the analysis of the contents of milk-sugar. The lecturer succeeded in finding a mode of procedure by which the quantities both of milk-sugar and albumen could be clearly fixed with all possible certainty. A resuming of the investigations of the formation of serum in churning received fresh interest from some churning experiments with cooled and uncooled cream, which Mr. Fjord carried out in the winter of 1879–'80. The experiments were made both with sweet and soured cream, which in part was churned at the ordinary temperature without any previous cooling, and in part after having first been cooled to about 1° C., and then warmed up to churning temperature. The result from these experiments showed that while the cooled cream gave a considerably larger yield of butter than the uncooled when the cream was churned sweet, so there was no difference whatsoever in the yield from cooled and uncooled cream when it was soured previous to churning. Here also the nature of serum seemed to exert considerable influence on these peculiar results. From two of these rows of experiments with sweet churning the lecturer secured carefully taken average samples of sweet milk, scummed milk, butter, and buttermilk for chemical control. The one row was carried out with milk from old milking cows, the other with milk from new milking ones. By this it was possible with the chemical researches to ascertain how far cream from absolutely "heavy" milk (old milking cows) was differently affected from sweet churning as compared with cream from entirely normal milk (new milking cows). The lecturer gave analyses of sweet milk, scummed milk, cream, butter, and buttermilk, and remarked that these analysis had been made with the greatest attention and exactitude, also that all the figures were middle numbers of double denomination which did not deviate more than, at the most, 0.02 per cent. respectively.

The yield from 100 pounds milk was—

A.—Milk from old milking cows:
79.428 pounds of scummed milk.
20.572 pounds of cream.
1. The cream cooled:
17.235 pounds buttermilk.
3.337 pounds butter.
2. The cream uncooled:
17.749 pounds buttermilk.
2.823 pounds butter.

B.—Milk from new milking cows:
79.143 pounds of scummed milk.
20.857 pounds of cream.
1. The cream cooled:
17.026 pounds buttermilk.
3.831 pounds butter.
2. The cream uncooled:
17.897 pounds buttermilk.
2.960 pounds butter.

From the following analyses it will be seen that buttermilk from uncooled cream in both cases is very rich in fatty substance, so that the smaller yields of butter must be attributed to the churning process alone:

TABLE 1.

Kind.	Old milking cows.					100 parts serum contain—			
	Fat.	Water.	Milk-sugar.	Ashes.	Albumen.	Water.	Milk-sugar.	Ashes.	Albumen.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
Sweet milk	3.675	87.578	4.200	0.773	3.774	90.919	4.360	0.803	3.918
Scummed milk	0.841	90.230	4.375	0.790	3.764	90.995	4.412	0.797	3.796
Cooled cream:									
Cream	14.637	77.265	3.524	0.685	3.889	90.514	4.129	0.802	4.555
Buttermilk	1.069	89.532	4.125	0.794	4.480	90.499	4.170	0.803	4.528
Butter	84.728	13.896	0.420	0.118	0.838	90.999	2.750	0.773	5.487
Uncooled cream:									
Cream	14.734	77.338	3.524	0.676	3.728	90.7	4.133	0.793	4.372
Buttermilk	3.627	87.408	4.006	0.760	4.199	90.698	4.157	0.789	4.356
Butter	84.564	14.040	0.487	0.119	0.790	90.956	3.155	0.771	5.118

Kind.	Young milking cows.					100 parts serum contain—			
	Fat.	Water.	Milk-sugar.	Ashes.	Albumen.	Water.	Milk-sugar.	Ashes.	Albumen.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
Sweet milk	3.864	87.234	4.326	0.779	3.797	90.740	4.500	0.810	3.950
Scummed milk	0.588	90.205	4.474	0.806	3.927	90.739	4.500	0.811	3.950
Cream	16.289	75.960	3.766	0.679	3.306	90.740	4.500	0.811	3.949
Cooled cream:									
Butter	84.932	13.610	0.320	0.120	1.018	90.328	2.123	0.797	6.756
Buttermilk	0.852	89.991	4.540	0.799	3.818	90.764	4.579	0.806	3.851
Uncooled cream:									
Butter	84.260	14.224	0.223	0.123	1.170	90.368	1.417	0.782	7.433
Buttermilk	5.039	86.171	4.352	0.777	8.661	90.744	4.583	0.818	3.855

From the figures for the compounds of serum (Table 1) it is shown that in old milking cows a difference occurs in the serum during the setting of cream, because the scummed milk serum is somewhat poorer of albumen than the sweet milk serum, but the reverse in being somewhat richer with milk-sugar. In the serum of cream there must naturally be found a proportionately larger amount of albumen than in the serum of sweet milk, which the figures also plainly show. A certain amount of albumen must, therefore, have risen up into the cream from the milk globules.

By calculations it is ascertained that that which is carried up with the cream by the milk globule contains 84.45 per cent. water, 1.35 per cent. ashes, and 14.20 per cent. of albumen, as also that from 100 parts of sweet milk serum 1.177 parts thereof is carried over into the cream.

During the setting of cream from young cows' milk the serum, on the other hand, has not sustained any difference whatsoever. The serum has exactly the same composition in sweet milk, cream, and scummed milk, as the figures in Table 1 clearly show. The milk from young milking cows, as is well known, does not possess the peculiarity of being "heavy," but here the milk globules do not raise anything but themselves under the cream setting. During the cream churning there is, on the other hand, a peculiar difference in their serum, and that as well in the experiments with cooled or uncooled cream. The same as in the previously mentioned experiments, the butter serum has been richer in albumen than the cream's serum, as the butter serum from the fresh milking cows even contained 1½ to 2 per cent. more albumen than the butter serum from old milking cows. When the difference is calculated in the chemical compound of serum from cream, butter, and buttermilk, they will show itself to be a like caseine hydrate to that previously described, only that the percentage composition of the caseine hydrate, which is formed in churning of cream from the old milking cows, is somewhat different from that which the caseine hydrate has from the younger milking cows, as will be seen from the following table:

One hundred parts caseine hydrate contain:

Components.	One old milking cow.		Two young milking cows.	
	Cooled cream.	Uncooled.	Cooled cream.	Uncooled.
Water	91.94	91.77	89.94	90.29
Ashes	0.72	0.72	0.71	0.68
Caseine	7.34	7.51	9.27	9.03

It is thus seen that caseine hydrate which is formed during churning of cream from young milking cows is the richest in caseine. That separation of the cream's serum which has taken place during churning (it must must be borne in mind that the cream was churned sweet) can be seen from the following figures:

1. Old milking cows (cream cooled), 100 parts cream serum = 0.99 parts caseine hydrate + 99.01 parts buttermilk serum.

2. Young milking cows (cream cooled), 100 parts cream serum = 1.79 parts caseine hydrate + 98.21 parts buttermilk serum. Under the churning all the caseine hydrate is introduced into the butter, together with a portion of the buttermilk's serum, and the collected serum's moisture in the butter hereby receives the following composition:

1. Old milking cow: 100 parts butter serum = 34.05 parts caseine hydrate + 65.95 parts of buttermilk serum.

2. Young milking cows: 100 parts butter serum, 53.62 parts caseine hydrate + 46.38 parts buttermilk serum.

In other words, serum in butter from old milking cows' milk contained over one-third of its weight of casine hydrate, and in butter from young milking-cows' milk as much as half of its weight of casine hydrate.

By the help of these figures, and with the chemical analysis of butter, one can now easily define the synthesis of butter. As an example, the synthesis is here given of butter from young milking-cows' milk.

It would thus appear: 100 parts of butter are composed of: fat, 84.932 per cent.; caseine hydrate, 8.080 per cent., which contains:

Water	7.267
Ashes	0.064
Caseine	0.749
Total	8.080

Buttermilk serum 6.988 per cent., which contains:

Water	6.343
Milk-sugar	0.320
Ashes	0.056
Caseine	0.269
Total	6.988

From the caseine hydrate chemical composition and its quantity in butter it is now possible to prove that it must have been formed in the churning process. It cannot merely emanate from the membranes of the milk globules, for in such case the serum in the cream of young milking-cows' milk would have been richer in caseine than the milk's serum, but the analysis (Table 1) demonstrates that the serum of cream and milk in this point has exactly one and the same compound. Furthermore, it is shown from above for the old milking-cows' milk that that which rises from the milk globules during the cream-setting has a totally distinct chemical composition from the caseine hydrate which is formed in the churning of cream.

By analyses of milk, butter, and buttermilk from several other rows of experiments, the lecturer had formed his decision of the caseine hydrate's composition and of its amount in butter, churned from several sorts of soured milk, as also investigated what influence it had upon the quantity and composition of the caseine hydrate when the cream was churned, sweet or sour. The large materials obtained by these analyses I am not, however, in a position to repeat, but must confine myself to the results gained therefrom, namely, the composition of butter and the caseine hydrate contained therein (Table 2).

The lecturer called attention to the great difference in the compounds of sweet butter, as the amount of caseine hydrate herein varied between large boundaries, as also the amount of buttermilk serum, whilst the sum of both these ingredients still was less variable in the different experiments, which was most clearly shown by the calculated amount of caseine hydrate and buttermilk serum per 100 parts fat. This variation in the compounds of sweet butter arose from the different natures of serum in the milk, as this, according to the lecturer's sundry investigations, varied not only with the season of the year and the period of lactation, but also with the breed of the milking cow and the animal itself. As fully demonstrating this are the cited experiments with milk from old milking and young milking cows, which, in a certain respect, represent the outer boundaries of variation in the serum's nature. When the results of these experiments are compared it will be seen that caseine hydrate was formed in much larger quantity in the churning of cream from young milking-cows' milk than from old milking ones. Butter from young milking-cows' cream was consequently much richer in caseine hydrate than that from the old milking-cows' cream, namely, respectively 12.91 per cent. and 4.40 per cent. per 100 parts of fat (Table 2, uncooled cream). The amount of caseine hydrate in all the other examined butter samples fall out between these outer boundaries; also the chemical composition of this matter varies somewhat according to the nature of the milk serum, which will be seen from Table 2.

But when the cream is soured before churning, not only will the composition of caseine hydrate, but also its quantity in the butter, be pretty regular. Although the cream, of which the given samples of soured butter, as cited in Table 2, was churned, became scummed in very different ways (centrifuge, ice, tubs, and water), and from milk from such different seasons of the year as January and June, it will be seen that not only the butter's, but also the caseine hydrate's compounds have been one and the same.

The lecturer takes it for granted that the caseine hydrate, partly, is already formed in the souring of the cream, and herein finds an explanation for the large quantity thereof in soured butter, as two-thirds to three-fourths of the serum in the examined samples of soured butter consist of caseine hydrate.

It now remained to investigate if the caseine hydrate which is to be found in the butter is mixed with buttermilk serum or not. An important part of the buttermilk serum which is to be found in the butter must arise from the buttermilk which adheres to the butter globules (butter grains) when they are taken out of the churn, and which by no means can the whole be removed in the kneading. The large quantity of buttermilk serum which is found in most of the examined samples of sweet butter cannot be attributed to this, and the lecturer, therefore, presumes that caseine hydrate in sweet butter is in part mixed with buttermilk serum. In sound butter the proportions are somewhat different. In the analysis of butter which had been partly washed in water before kneading and partly treated in a normal way, the lecturer proved that that which was washed out of the butter was for the most part buttermilk. The most characteristic nature of this (as compared with caseine hydrate) is, namely, the milk-sugar; and in the cases investigated there was washed out 42 to 54 per cent. of the butter's milk-sugar contents, while only 12 to 28 per cent. of the butter's caseine amount was removed in the washing. The caseine hydrate must, therefore, be perceptible in the butter-globule's interior (milk-globules' conglomerates). In comparing these observations with the results from the microscopic investigations of the formation of butter, namely, of the small conglomerates of agglutinized milk globules under churning process, cemented with a moisture layer of larger conglomerates, one comes to the conclusion that caseine hydrate either by itself or mixed with a part of buttermilk serum is the binding object or cement which causes the butter formation. Butter serum is of a peculiar clinging nature, and of rather firm adherence to fatty substances, so strong, that butter, as is well known, can be melted without its yielding its serum or being melted in a clear state. In proof of this opinion of the churning process the following observations tend to witness. If butter formation depends upon the caseine hydrate, then it must occur so much the more rapidly the more easily caseine hydrate is formed. That this is really the case is shown in the practical experience during churning of soured cream in comparison with the churning of sweet cream; and the analyses (Table 2) demonstrate that soured butter contains a much larger quantity of caseine hydrate than sweet butter. Investigations of the two samples of butter which, as previously mentioned, were churned from centrifuged cream, partly at 28⅓ C., and partly at a temperature of 1° C., have yielded results which are very enlightening.

The samples of butter have the following composition:

TABLE 2.

	Sweet butter.							Soured butter.			
Experiments carried out.	December 19, 1876.	December 12, 1879.				June 24, 1880.	March 18, 1881.	January 24, 1880.			June 24, 1880.
The treatment of the cream.		Old milking cows.		New milking cows.							
		Cooled.	Uncooled.	Cooled.	Uncooled.						
System of the cream's separation	Ice.	Tubs.	Tubs.	Tubs.	Tubs.	Water.	Ice.	Centrifuge.	Ice.	Tubs.	Water.
100 parts butter contained—											
Fat	85.53	84.73	84.57	84.93	84.26	84.17	85.74	82.30	83.27	82.78	82.82
Caseine hydrate	4.49	5.20	3.72	8.08	10.87	4.53	6.80	13.20	12.03	12.96	9.9
Buttermilk serum	9.98	10.07	11.71	6 99	4.87	9.04	7.46	4.50	4.70	4.26	4.3
Butter salt	.....	.....	.....	.....	.....	2.26	.....	.....	.....	.....	2.9
Per 100 parts fat the butter contained—											
Caseine hydrate	5.25	6.14	4.40	9.51	12.91	5.38	7.93	16.04	14.44	15.66	12.00
Buttermilk serum	11.67	11.88	13.85	8.23	5.77	10.75	8.70	5.47	5.65	5.14	5.24
Total	16.92	18.02	18.25	17.74	18.68	16.13	16.63	21.51	20.9	20.80	17.24
100 parts caseine hydrate contained—											
Water	92.58	91.94	91.77	89.94	90.20	95.00	92.54	93.26	92.37	92.50	92.22
Ashes	0.69	0.72	0.72	0.79	0.77	0.59	1.37	0.65	0.77	0.82	0.92
Caseine	6.73	7.34	7.51	9.27	9.03	4.30	6.09	6.09	6.86	6.68	6.86

One hundred parts of butter contained (churned) at—

	28½° C.	1°—12° C
Fat	78.00	83.31
Caseine hydrate	17.32	11.48
Buttermilk serum	4.68	5.21

Per 100 parts fat the butter contained—

Caseine hydrate	22.20	13.78
Buttermilk serum	6.01	6.25

At 28½° C. the butter formation took place in 16 minutes, at 1°—12° C., in 242 minutes.

Notwithstanding that both the butter samples contained an equal amount of buttermilk serum per 100 parts fat, the amount of caseine hydrate is, however, greatly different and nearly double as much in butter churned at 28½° C. as in the butter churned at a lower temperature. But the churning process was brought to a close at the 28½ C. in 15 times less time than with 1° to 12° C. A similar observation had previously been made by the lecturer. The result of investigation from Mr. Fjord's experiments with cooled and uncooled cream show somewhat the same from young milking-cows' cream. As will be seen from Table 2, butter contained, per 100 parts of fat, in—

	Cooled cream.	Uncooled cream.
Caseine hydrate	12.91	9.51
Buttermilk serum	5.77	8.23

The butter formation took place with cooled cream in 24 minutes, and with uncooled in 27 minutes.

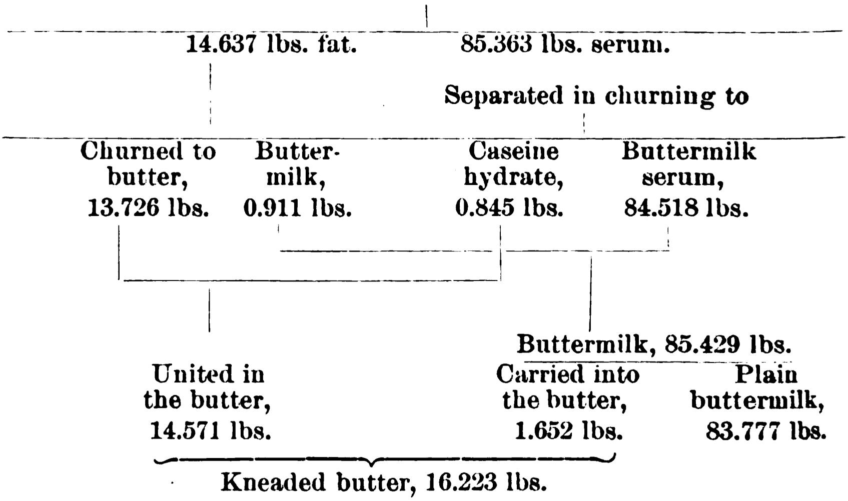
Thus the quicker the butter formation takes place, so much the more caseine hydrate will be contained in the butter. The lecturer's conception of butter formation in churning can be exemplified in few words:

Butter formation in churning is commenced by an agglutination of the microscopic milk globules, but is completed therefrom when the small dots of agglutinized milk globules are conglutinized with the help of a peculiar substance, which is formed during churning, caseine hydrate. On the other hand the change in the milk globules from a liquid to a fast form, is without influence on butter formation.

From a chemical point of view the formation of butter can be illustrated by the following detailed scheme, which was produced by the lecturer.

An example of the formation of butter from churning of sweet cream:

One hundred pounds of cream contained—



14.637 lbs. fat.

85.363 lbs. serum.

Separated in churning to

Churned to butter, 13.726 lbs.

Butter-milk, 0.911 lbs.

Caseine hydrate, 0.845 lbs.

Buttermilk serum, 84.518 lbs.

Buttermilk, 85.429 lbs.

United in the butter, 14.571 lbs.

Carried into the butter, 1.652 lbs.

Plain buttermilk, 83.777 lbs.

Kneaded butter, 16.223 lbs.

The lecturer cited the use of the microscope investigation of butter in the detection of adulteration of butter of different nature, as also for the purpose of being able to tell the artificial from the natural butter. As all natural butter, in a microscopic point of view, is composed of milk globules and drops of butter serum (caseine hydrate), which latter amount to several millions in a cubic millimeter of butter, so a thin layer of natural butter will show itself under the microscope (with a magnifying power of at least 300 to 400 times) like a thick collection of serum drops. When foreign matter is kneaded into the butter, the serum drops are rejected from the places where the fatty substances are assembled, and here are to be seen only sparse fat spots. Something similar occurs in the kneading of artificial butter, as this only contains a few but relatively large serum drops. Artificial butter is, on account of its sparse serum drops, easily to be distinguished from natural butter. The kneading-in of water into the butter produces a peculiarly striped moisture layer, which natural or normal butter can never contain. This part of the lecture was exemplified by the lecturer with drawings as carried out under the microscope.

The lecturer, in conclusion, returned thanks to those who had rendered him every assistance during his work on the subject of dairy thrift. He was especially grateful for the confidence shown him in his chemical labors, as well as for the subjects which he was asked to solve. With his thanks to Professor Fjord, he would join in the wish that their joint labors, which had borne so many and such good fruits, might be continued and if possible, extended at a future period.

At the conclusion of this lecture Professor Segelcke tendered his thanks to Professor Storch for the many new analyses of milk, cream, butter, &c., which he had here placed at their disposal. It was a most welcome gift, and many former ideas were now without doubt permitted to be set right through the medium of them; as, for example, of the water contents in sweet and soured butter. No less welcome and interesting were the different microscopic researches on butter here made public by Mr. Storch for the new light they cast over the formation of butter, and the materials in natural butter, in and for itself, as also compared with those in artificial butter; still it will be necessary to make churning experiments at a temperature equal to butter's melting point or above, before Soxhlet's theory of churning can be said to be disproved. The experiment at 28° C. could scarcely be said to be decisive. It was also very doubtful if Storch had succeeded in giving proofs for the different groupings of serum's nature in milk and the products obtained therefrom. The methods which one was still directed to for the purpose of forming a judgment as to the albumen and milk-sugar materials, scarcely allowed to form such extensive conclusions, especially as regarding the conditions of milk-sugar. Even the analyses, 1, 3, and 7, in the first row of experiments, seemed to speak against placing too much reliance on the determined quantities of milk-sugar, and if milk-sugar were left out of the question, it appeared to the speaker that the relations between the albumen matter, ashes, and water in these as well as in other analyses spoke against, rather than in favor of, the supposed "serum variation." This doubt, however, did not exclude that behind Storch's hypothesis regarding the grouping of albumen matter, and the part which this played in the formation of butter, there lay something which had yet been overlooked, and by means of which one might be put on its traces, and the speaker would greatly wish that Storch might find occasion to investigate the matter still further, as a right understanding of what took place during the formation was of great importance to dairy thrift. Storch was fully aware that the sugar calculations were somewhat high, but must nevertheless maintain that they were relatively correct. That which in his analysis he had put down as milk-sugar contained a little of azotic matter, which, however, was not albumen; they were easily dissolved in water, and bore themselves with indifference to the ordinary chemical means of joining, like as with sugar, wherefore they must follow with the sugar in the cited change of milk serum during churning. In the calculations of caseine hydrate's percentage composition, the proportion in the sugar quantity was only taken into account, as also the difference between the other serum parts. It was plainly evident that a great miscalculation must be made in the sugar calculations in order to change the first decimal in the compounds of caseine hydrate (even unto a miscalculation of 25 per cent.) That the proportions between water, albumen, and ashes were not of any great difference in serum of cream, butter, and of buttermilk, arose simply from the fact that the same proportions between these materials was also to be found in caseine hydrate. On these grounds the serum in soured-butter could consist of three-fourths caseine hydrate and one-fourth buttermilk serum, without any change taking place in the cited proportions. There was, however, another question on which the speaker was in doubt, and that was, whether the caseine hydrate found by him in his calculations was the only arithmetical difference in the compounds of serum from milk, butter, and buttermilk. The speaker had, in reference to this question, secured the aid of one of the best-known mathematicians, and with his co-operation had been able to put the calculations of the results from the experiments into such shape that the solving of the problem depended upon the solution of the equations of first degree. From this it would appear that there could be no other difference between serum of these products (milk, butter, and buttermilk) than that ascertained by the speaker; therefore his calculations must be correct, which was also shown in the similar results from a long list of different experiments.

HENRY B. RYDER,
Consul.

CONSULATE OF THE UNITED STATES,
Copenhagen.

THE IRISH FISHERIES.

REPORT BY CONSUL PIATT, OF CORK.

THE FISHERIES EXHIBITION AND IRISH FISHERIES.

The International Fisheries Exhibition and Conference now being held in London has been the means of once again directing English public attention to the undeveloped condition of one of the most, if not the most, important of Irish industries—the Irish fisheries. As a food supply the Irish fisheries are of so great importance to the English working classes that it is astonishing how for so many years they have been permitted to remain undeveloped, and it is equally unaccountable how the English Government has permitted so valuable a means of increasing national wealth to be neglected. The subject is undoubtedly one of the first importance, not only to the working classes in England but to the starving peasantry of Ireland as well—to the former as a means of supplying an unlimited quantity of wholesome food at a cheap rate, and to the latter of providing constant and remunerative employment. The conference now being held in London in conjunction with the exhibition has been the means of eliciting a vast amount of information on the subject, which has served to open the eyes of the English public to a proper appreciation of the situation as regards the future food supply. As the outcome of this information which has been extensively disseminated through the press, there is already growing up throughout England an unmistakable feeling that there is pressing necessity for reform in the fish supplies. The most steadfast conservatives have, in the course of a few weeks, been converted into uncomprising radicals. Physical and biological sciences have joined their forces with political economy in fathering the great object, and as an evidence of the reaction so quickly setting in I may mention that already the Billingsgate monopolies are fast breaking up, and the London fish-consuming public no longer submit to the dictation of Billingsgate fishmongers.

Curiously enough considerable difficulty was experienced at the outset in getting an Irish representative at the conference, and it was only on the intervention of the Duke of Abercorn, an Irish nobleman, that

Mr. Thos. F. Brady, one of Her Majesty's inspectors of fisheries in Ireland, and Mr. I. C. Bloomfield, of Castle Caldwell, County Fermanagh, were selected to represent Ireland. Owing to the official position filled by Mr. Brady the duty of explaining the past and present condition ot the Irish fisheries and what was needed for their successful development in future, devolved on Mr. Bloomfield. The choice of Mr. Bloomfield was a happy one, inasmuch as he has devoted years of study, research, and travel to the subject, visiting as he has done the United States and some European countries in search of practical information. A philanthropist of the truest type, whose heart was in his subject, Mr. Bloomfield treated it in a manner most palatable to English stomachs, and so pressed home truths and unanswerable arguments as to work a complete reformation in the minds of those who were at the outset unwilling listeners to his pleadings.

IRISH FISHERMEN.

There are perhaps few classes in this or any other country so well deserving of consideration as the Irish fishermen. Like their brethren all the world over, they are among the hardest and most uncomplaining toilers to be met with, notwithstanding which fact they are forced to bear a character for laziness and want of energy and enterprise. This character the men by no means deserve. They are a hardy race, and labor incessantly to procure the staff of life, but, unfortunately for themselves and those dependent on them, they are most unfairly handicapped in the race. There are few scenes more distressing than those witnessed annually at the more important of the Irish fishing stations. These places are visited by splendidly equipped fishing fleets from the Isle of Man, the south of England, and from France, which carry off to remunerative markets the wealth which teems on the Irish coast, while the poor Irish fishermen, down-hearted and discouraged, are forced to look on in helpless silence, unable to reap the harvest which a bountiful Providence sends to their shores. For the most part the craft of the Irish fishermen are small, badly equipped, and only suited to harbor fishing, and they are without the capital necessary to provide larger boats with more improved gear, which is all they require to enable them to compete with the better equipped craft ot the strangers. The Irish fishermen are not less brave or enterprising, but with the craft at their disposal they dare not leave the harbor except in fine weather, while the strange fishermen are in a position to defy the elements. In the remote districts in which many of them reside they have but few friends, and they are unable to offer security even if they were afforded facilities for borrowing capital upon easy terms, which, so far as my inquiries have gone, has not been the case hitherto.

DECLINE OF THE IRISH FISHERIES.

Although the fisheries of Ireland were never thoroughly worked, the past appears to have witnessed far greater activity around the coast than has been seen in later years. For over a quarter of a century, at all events, there has been a steady decrease both in the number of the craft employed and in the number of hands engaged in the industry.

During the year preceding the famine, the fleet engaged in fishing operations off the Irish coast numbered 20,000, while the aggregate crews were 113,000. In 1867, twenty years later, the fleet had fallen to 9,000, or less than half, and the crews to 38,000, or nearly one-third.

During the succeeding five years, the fleet was still further reduced to 8,000, and the number of hands employed to 31,000, and last year the number of vessels so engaged numbered but 6,089, and the crews 22,351. Ireland has a coast line of 2,670 miles, of which but a few hundred miles are at all fairly worked, and there are only 333 miles of coast from which the fishery inspectors are enabled to get reliable returns, leaving 2,337 miles of coast without any return. These figures not only strongly mark the decline of the Irish fisheries, but they disclose a very discreditable state of things when viewed in connection with another statement in the same fishery inspector's report, viz: That every harbor, bay, and inlet on the coast annually teems with mackerel, herrings, pilchards, hake, cod, sprats, &c.

THE OYSTER FISHERIES.

The oyster fisheries, more than any other, perhaps, are in a seriously declining state, as will be readily seen by the following statement, showing the captures and the values for each year from 1873 to the present:

Years.	Quantity.	Amount realized.
	Barrels.	
1873	13,640	$65,379 06
1874	7,520	35,213 99
1875	9,622	45,871 62
1876*		
1877	8,706	42,367 74
1878	7,325	35,647 11
1879	6,013	21,767 85
1880	5,848	25,442 06
1881	4,881	20,989 21
1882	2,609	10,935 29

* Less than in 1875

The fishery inspectors attribute this failure to overdredging and the failure of spat for a series of years. They derive hope, however, from the fact that several millions of French oysters from the Gulf of Morbihan have recently been imported wherewith to stock the beds of private individuals.

THE HERRING FISHERIES.

Reliable statistics as to the capture of herring last year were only obtainable from eleven stations, viz, Howth, Arklow, Kinsale, Greenore, Ardglass, O'Meath, Warren Point, Kilkeel, Annalony, Courtown, and Balbriggan. From these places the returns show a total capture of 70,210 mease as compared with 47.072 mease in 1881. Though the take is larger than that of 1881, it is less than that of the years 1878, 1879, and 1880. Large quantities of herrings remained off nearly the entire coast of Ireland from August to December of last year, and if adequate means of capture existed and better harbor accommodations were provided, the take of herring would have been much larger at many stations. The number of boats engaged in this fishery last year was 1,192, made up as follows: Irish, 736; Scotch, 365; Manx, 84; and English, 17. The average price realized was $5.42 per mease, and the total value $383,772.19.

THE MACKEREL FISHERIES.

While the mackerel fishery for the season of 1882 has been regarded as satisfactory with respect to the number of fish captured, viz, 199,799 boxes, each containing 120, the money result, $625,213.85, is not regarded as so satisfactory, inasmuch as in the preceding year a capture of 130,252 boxes realized $715,346.30. These returns do not include fish consumed in the neighborhood of the fishing stations, which represents 134,600 mackerel additional, nor a further capture of 429,160, or 3,576 boxes, after the regular season had closed. The following statement shows the number of vessels engaged from England, Ireland, and Scotland, the quantity of fish captured, and the amount realized during the past seven years:

Years.	English and Manx.	Irish.	Scotch.	No. of boxes.	Amount realized.
1876	217	133	13	139,083	$536,400 23
1877	229	142	15	124,562	585,916 86
1878	265	190	20	92,626	475,885 30
1879	298	218	20	167,889	488,849 65
1880	556	181	20	118,718	672,560 03
1881	357	249	20	130,252	715,346 30
1882	327	263	25	199,779	625,213 85

It will be seen by the foregoing statement that the increase in Irish vessels is very remarkable, being close upon 100 per cent., while the English and Manx boats have been increased to only about half that extent. During last season seven steamers and one sailing vessel were employed in conveying the fish from Kinsale to the English market. During the same season ten special steamers, two coasting steamers, and one sailing vessel were engaged in taking mackerel from Baltimore, a comparatively new station on the southern coast. With respect to the mackerel fishery the inspectors report as follows:

> Although on some parts of the coast a fair amount of enterprise has been exhibited by fishermen in the pursuit of their calling, during the important mackerel season, from March to June, it is a subject of regret that more efforts are not made in other months of the year. By the coast guard reports it will be observed that all along the Waterford coast, say from Fethard to Ardmore (County Waterford), abundance of herring, mackerel and pilchard are to be found in great shoals from June to October, yet they are not looked after by the larger craft. The fishing during these months along this coast is almost entirely confined to the inshore fishermen who have neither boats nor gear of a character to suit the fishing. It is believed that if the larger vessels were employed in the work during the months named it would be found to be remunerative. The same remarks apply to most other portions of the coast of Ireland.

One fact which has come to my knowledge from a reliable source will serve to illustrate two points, viz: The great need which exists for the construction of boat harbors and landing piers, and the readiness with which Irish fishermen avail of such advantages. Up to a few years ago the historic little town of Baltimore, situated on the south coast, was unknown as a fishing station save through the appeals, which were made annually in local newspapers, for money to enable the fishermen to provide some necessary gear in place of what had been destroyed, or for contributions towards the repairing of their boats which had been damaged owing to the absence of a proper boat harbor. Matters had been dragging on in this manner from year to year, and the fortunes of the fishermen were going from bad to worse. In this extremity Father Davis, administrator parish priest, put himself in communication with some people of wealth and influence, made known clearly the harvest there was each year to be reaped and the willing hands there were prepared to gather it, but that unfortunately they had neither boats nor gear of a kind suitable to their embarking in the enterprise, and no safe landing place. The Baroness Burdette-Coutts, a wealthy English lady, was so struck by the story told, that she, with great generosity, supplied the necessary funds, with the result that the first season during which these facilities were made available, in 1881, the capture of mackerel almost doubled the return for the preceding year. In the year 1880, the number of boxes taken at Baltimore was 9,845, while in 1881, when proper accommodation was provided, the number of boxes increased to 17,251. Last year the number more than trebled the return of 1881, no less than 56,643 boxes having been secured. It may be added, on the authority of the banker at Skibbereen, the nearest market town to Baltimore, that the fish purchases made in one day at Baltimore during the past season required a sum of $36,498.75, a truly handsome sum to be distributed among the villagers. The result is certainly one which proves alike honorable to the kindness and sagacity of the generous giver, as well as to the character of the recipients who did not fail to make good use of the facilities afforded them. The Irish fishery inspectors, recognizing the importance of this fishing station, have recommended the establishment of a light, to serve as a guide to the fishermen, and enable them to reach the harbor upon dark and stormy nights, when to remain at sea would involve considerable risk. This recommendation the government is favorably considering.

PILCHARDS.

During the past season large shoals of pilchards were observed off Helvich Head and Ardmore, county of Waterford, Old Head of Kinsale and Barlogue, county of Cork, and between Lamb Head and West Cove, in the county of Kerry. Fifty-four hogsheads were cured at Baltimore for Italian markets and sold at Genoa for $22.86 per hogshead. This enterprise is not largely embarked in, though the fact of the price being but $17.03 per hogshead in 1881, while it reached $22.86 in 1882, speaks well for the quality of the fish. Should the supply prove abundant this year, it is expected that much larger quantities will be cured for exportation.

FISHERY PIERS AND HARBORS.

The fishermen lose much, owing to a want of boat harbors, landing piers, and boat slips; and although there are many other obstacles in the way of their successfully developing the enterprise in which they are engaged, the removal of these is secondary in consideration to the providing of proper pier and harbor accommodations. In many instances existing harbors require but little outlay—the removal of a rock or the construction of a rough breakwater—in order to meet all requirements, while in other instances the construction of artificial harbors is necessary. In the year 1878 the Irish fishery inspectors reported to the Government that seventy-one such harbors needed to be either constructed or improved; since then thirty-seven of these are being attended to. The inspectors in their report of last year again refer to this important matter as follows:

> Every year's experience has the more fully convinced us of the correctness of our views of the importance of such nooks, if ever the fisheries of these portions of the coast from which such applications have emanated are to be developed to anything

like the extent to which we believe them capable. The policy of providing public money for the promotion of such objects of public utility as those to which we refer, in which the interests of the community and of the poorer classes are more concerned than those of individual capitalists, has been deemed to be wise and beneficial in all countries. There are various accommodations required by fishermen which are peculiar to their trade, and in which neither landlords nor private capitalists have in many cases any pecuniary interest, and which it would be impossible for the fishermen to provide; without them, capital cannot be successfully embarked in fishing enterprise. We could instance places where the judicious application of money in improving or constructing harbors would, without doubt, have the effect of stimulating enterprise and be the means of materially benefiting the condition of the people, and of producing probably such an increased quantity of food as would be more than equivalent to the outlay.

THE COST OF CARRIAGE.

Another serious disadvantage under which the fisherman labors is the high freights charged for the conveyance of the fish to remunerative markets. The railway system of Ireland is cut up into a number of short lines, each managed by different companies, who do not work amicably at all times, though they take good care to extract the uttermost farthing for the conveyance of goods. Unfortunately, when the demands of the public carriers are satisfied, there is as a result a very considerable diminution in the fisherman's profits. The employment of steamers to take the fish across the channel has caused some improvement as far as the south coast stations are concerned, but adverse winds and tides frequently make this mode of conveyance unreliable. Frequent complaints are made in Dublin, Cork, and other Irish cities with regard to the scarcity and consequent high price of their fish supplies, while at the same time reports are being published in the newspapers of tons of mackerel and other fish being allowed to rot in adjoining fishing towns for want of ice to save them or sufficient means of curing them. Having inquired why the fish were not at once dispatched to those cities and towns in Ireland where something like a fish famine was existing, and where a good return ought to be had, I was informed that the cost of carriage was so high the enterprise would not pay. In illustration of this, I give the following particulars: In June, last year, two consignments of mackerel, consisting of 19 and 30 boxes, each containing 120 fish, were dispatched from fishing stations situated on the county of Cork coast to the Dublin market. The expenses charged were $24.83 and $37.46, respectively, and the balances remitted to the dealers were $2.89 in one case and $6.32 in the other, making a total profit of $9.21 for 5,880 fish, which were of very fine quality and in splendid condition. On many occasions the amount credited barely covers the expense of carriage from the fishing station, leaving scarcely any return for the fishermen.

THE GOVERNMENT AND IRISH FISHERIES.

The people of Ireland in general, and the fishermen in particular, complain strongly, and not, it would appear, without some show of reason, that even since the Union England has given £1,000,000 (or $4,866,500) more toward developing Scotch fisheries than has been given to Ireland for the same purpose, although the population of Scotland is far smaller. Mr. Blake, one of the members of Parliament for the county of Waterford, introduced a bill providing for the granting of £1,000,000 ($4,866,500) to Ireland out of the Irish church surplus fund, to be applied toward the development of the Irish fisheries, and, though the provisions of the bill were supported by the Irish fishing inspectors, who certified that every penny of the money was required for the purpose, the act of Parliament which passed this session on the subject only provides for an expenditure of £250,000 ($1,216,625) upon the improvement of harbors and the construction of piers, &c. Though this sum is altogether inadequate, it will be the means of vastly improving the present condition of the Irish fisheries.

DISCOURAGEMENT OF IRISH FISHERMEN.

The following anecdote, taken from "Social Notes," contributed by Professor Williams to the Gentleman's Magazine, illustrates one of the many ways in which Irish fishermen are discouraged, and the obstacles placed in the way of their improving their condition:

> I was stopping for a day or two at the Lenane Hotel, on the banks of that beautiful Irish fjord, the Killary. The other visitors were sportsmen, chiefly bent on salmon-fishing on the Erriff, the terminal river of the estuary. But rain was deficient, the river low, and the fishers were grumbling loudly. My Norwegian experience convinced me that there must be plenty of the cod and whiting tribe in the fjord itself, and I therefore suggested that the despondent sportsmen should condescend to try sea-fishing. Two of them assented to this, and we joined in the hire of a boat and two rowers, my object being the exploration of the Little Killary, best reached by water. We found that the boatmen were well supplied with sea lines, and that they knew the business of collecting mussels and using them as bait; I was accordingly rowed to my landing place, and while crossing the hills the other two devoted themselves to the fish-hooks. When I returned to the boat, two hours afterwards, I found them exulting in their splendid sport, in which I then joined. We returned, and on the way back strung together four dozen of fine large whitings and a few gurnets, leaving a considerable number of small fish in the boat. This with two lines for two hours and three lines for an hour more. The fish were cooked and eaten by the hotel guests, who were unanimous in denouncing the idleness and stupidity of the boatmen, who, with all these fish at hand, had failed to supply the hotel, which had been fishless for more than a week before. Having heard so many of these flippant verdicts against poor Paddy, which on further evidence proved to be unjust, I determined to investigate this, and accordingly asked the boatmen why they did not fish on their own account instead of waiting to be hired. I demonstrated by simple arithmetic that 100 whitings, easily to be taken in a short day and sold at only 3 halfpence each, would give the two men 6*s.* 3*d.* each; that during the season, while the hotel was full of guests clamoring for fish, there was a demand on the spot. The men smiled, but would not discuss the subject. I saw that they were afraid to do so. The car-boy who drove me to Cong the next day was more communicative. He said that if the men caught the fish and brought them to the hotel for sale they would have an offer of 1*s.* for the lot instead of 12*s.* 6*d.*, and if they refused they might eat the fish themselves or leave them to stink; that the boatmen did not tell me this, lest I should charge the hotel-keeper with unfairness and get them into trouble. This little incident fairly represents the crucial point of the Irish fisheries question. Boats, nets, and tackle have been provided, and, this being done, the penniless peasant, ignorant of commercial transactions, is supposed to do the rest—that is, to find a market, find rapid means of transport for a most perishable commodity, and sell it at remunerative prices. He fails to do this, and hence the whole of England rings with the same abuse of the lazy, shiftless, hopeless "race," which I heard so freely applied to the two boatmen who refused to work for 6*d.* a day for an employer who would resell their fish at about 1,000 per cent. profit. (According to my hotel bills, whitings were evidently estimated as worth at least 6*d.* each.) These men worked for us most cheerfully and thankfully at 2*s.* 6*d.* per day, and what I have seen of other Irish boatmen and the would-be fisher class proves that they would all do the same for anybody else; but to catch fish and then have them cheapened down to manure value by grasping middlemen is more than cultivating a rack-rent farm, where the bacon, the butter, the eggs, the veal, and the poultry are the landlord's share of the produce, while the residual—potatoes and cabbages—are divided between the farmer, his wife, children, and pigs. The censures so freely applied to the Irish fishery fiasco should rather fall upon those who supplied the fishing plant on a mountain-girt coast where the means of communication with a sufficient market were such that the fish would become unfit for human food before reaching it. Fishermen do not employ commercial travelers to carry samples and sell their goods on commission.

INLAND FISHERIES.

With regard to the inland, or river and lake fisheries of Ireland, they may be said to be just as much if not more neglected than the deep-sea fishery. The breeding streams are insufficiently protected from poachers during the spawning season, and there is very considerable destruction of salmon carried on in this way, notwithstanding the fact that in their spent condition the fish are of little value. The inland waters of Ireland, which at present contribute almost nothing to the national food supply, cover an area of 574,887 acres, and, as was very forcibly pointed out by Mr. Bloomfield, Ireland's representative at the fisheries conference in London, these may be made very remunerative if only the example of the United States Government were followed. Neither in the United States nor in France, Mr. Bloomfield pointed out, was the cultivation of the fish left to private enterprise. In the United States appropriations to the amount of $1,000,000 had been already granted by Congress to develop this great source of national food, and the French Assembly was also alive to the importance of developing he inland fisheries of France.

In his last report upon this section of the Irish fisheries, Major Hayes, one of the fishery inspectors, states in reference to the south of Ireland, of which he has charge:

> Although the quantity of salmon captured during the season of 1882 in the eight istricts under my immediate supervision was very much less than in the year 1881, have no reason to believe the fisheries, on the whole, are at all in an unsatisfactory ondition. The minor districts of Skibbereen and Bantry, from circumstances peculiar to themselves, are not prospering, but in the others for many years there has been enerally satisfactory progress year by year, and I am inclined to attribute the falling ff in 1882 to special causes, perhaps superabundance of water in the rivers interfering with the working of the nets, and the prevalence of adverse winds, which are known to operate prejudicially by preventing the fish entering the rivers. As regards floods, t may be well to draw attention to the rainfall during three important months of the shing season of 1881 and 1882, which shows a very great excess in 1882 over 1881. The rivers generally throughout all the districts were stocked very fully with breeding fish during the winter months, so that I have little doubt as to the continuance f the progress of the fisheries being maintained. As I have often stated, I fully be-eve that if sufficient funds could be made available so as to provide thorough preservation of the fish on the spawning grounds during the winter months, we should very soon see an enormous addition to our annual capture of salmon, and thus increase astly the supply of this valuable food. The assistance of the Royal Irish Constabu-ry and coastguard has been most valuable and, as hitherto, was invariably cheer-ully given whenever required by either the board of conservators or ourselves—ndeed, without their valuable aid the fisheries would suffer to a great extent.

Major Hayes adds:

> I am indebted to R. D. Mahoney, esq., Dromore Castle, County Kerry, for the fol-wing interesting account of his proceedings in the way of artificial propagation for e season 1882: "The breeding this season was very successful. The percentage of sses scarcely appreciable, owing to the dry process of impregnation. I imported 000 Rhine ova from Freiburg, in Baden. These ova are smaller and poorer looking an those of our fish. They arrived, however, in good condition, with the eyes rmed and very few blanks among the eggs. All went well until they came out, hen their trouble began. The little fish, instead of being straight as an arrow, with e umbilical vessel pendant beneath them, were nearly all curved round it with head d tail bent downwards and attached on one side. They were capable of no movement except in a rotary fashion, and so they spun round with giddy velocity until ey died. I have occasionally found an odd one of our own ova affected in this way, ut in this case only about 400 of the Rhine salmonidæ were hatched free from this formity. These survivors throve as well as our own fish, and were turned with hers into the streams. If they come to perfection, there will be no difficulty in owing them from our own fish should any be taken by net or rod.

In Major Hayes district, which embraces the south of Ireland and extends from Llea Head, county of Kerry, in the west, to Wicklow Head in the east, and includes eight fishery districts, poaching was found to be on the increase last year. There were 262 prosecutions against persons for violations of the fishery laws, 250 of which were successful, and fines varying from $1.21 to $29.19 imposed in each case. Although several salmon were captured in the district weighing 28, 30, and 32 pounds each, and one at Yonghal weighing 50 pounds, the average weight of salmon captured during the season did not exceed 11 pounds, and of peale 6¾ pounds. The price varied from 66 cents per pound in January to 12 in summer. The number of engines licensed in the district during the year for the capture of fish was as follows: Single rods, 943; draught nets, 211; drift nets, 202; snap nets, 299; cross lines, 25. There were, in addition, a few bag nets, cribs, and sweepers. During the year there was a sum of $18,633.19 made available for the protection of the fisheries in the district, derived chiefly from license duty, fines, and sales of forfeited engines. In three of the districts the pernicious system of poisoning the rivers was resorted to; in several instances cattle which drank of the water so poisoned died.

In Mr. Brady's district, extending from Doulus Head, in Kerry, to Mullaghmore, in the county of Sligo, and embracing the counties of Kerry, Clare, Limerick, Tipperary, King's and Queen's Counties, Galway, Longford, West-Meath, Mayo, Roscommon, Leitrim, Cavan, and Sligo, the take of fish was much less in 1882 than during the preceding year. In fact, on the whole west coast of Ireland the salmon fisheries during the year 1882 have shown a very marked falling off in capture. In some districts the decrease is sought to be accounted for by the influx of dog-fish, but this is not regarded as satisfactory, inasmuch as there is a considerable falling off in other districts, where the dog-fish does not exist. The average weight of salmon taken was 12 pounds and of peale 7 pounds, and the average prices were 60 cents and $1.21 per pound, respectively. There were but 21 prosecutions for breaches of the fishery laws, for which fines varying from $2.43 to $19.46 were imposed. The following engines for the capture of salmon in the district were licensed during the year, viz, 463 rods, 167 drift nets, 143 draught nets, 73 cross lines, 42 snap nets, 41 Scotch weirs, 22 cribs, 23 pole nets, 21 bag nets, and 269 gaps, or eyes, for the capture of eels. The total revenue derivable from fines and licenses, duties, &c., available for the protection of the fisheries in the district, amounted to $18,526.76, which is exclusive of $4,866.50 a year spent by private proprietors in Ballina district and a considerable sum in Galway district.

In Mr. Johnstone's division, which extends from Wicklow Head to Mullaghmore, county of Sligo, and which embraces the north of Ireland, the salmon fisheries are generally in a prosperous condition, possibly owing to the fact that in the northern province there is not so great a dearth of employment, and poachers are not, therefore, so numerous. In a few districts dynamite was used for the destruction of fish. The weight of salmon in the eight divisions which go to make up Mr. Johnstone's district varied from 9 pounds to 16 pounds, and of peale from 4 to 7 pounds. The highest price obtained in some divisions was 40 cents per pound, and the lowest 12 cents; in others, the highest price was 73 cents and the lowest 20 cents per pound. The number of engines used in the majority of the districts was in excess of the number employed in 1881. The quantity of breeding fish was also greater than during the previous year. The sum realized by the sale of licenses amounted to $20,980.49, and this was made available for the preserva tion of the rivers. The offenses against the fishery laws were not more numerous than during the preceding year.

In an appendix which I inclose will be found, in tabular form, some additional information relative to the Irish fisheries, including part of that already given above.

JOHN J. PIATT,
Consul.

UNITED STATES CONSULATE,
Cork, September 20, 1883.

Summary of the quantity of herrings, mackerel, and cod exported to English markets from Irish fisheries from January 1 *to December* 31, 1882.

[In boxes of 2 cwt. each.]

To—	Herring.	Mackerel.	Cod.
London	13,922	19,104	7,777
Nottingham	2,833	3,079	2.619
Bradford	8,011	2,611	3,763
Manchester	12,176	7,201	6,732
Sheffield	4,679	4,113	2,105
Wolverhampton	3,010	5,105	1,768
Leeds	4,612	3,076	1,825
Liverpool	12,799	12,978	8,099
Birmingham	8,015	4,022	3,070
Total 1882	70,057	61,289	37,758
Total 1881	115,233	83,459	54,365
Decrease	45,176	22,170	16,607

Computing herrings at $6.56 per box (the price realized in Liverpool market), the value of 70,057 boxes would be	$460,258 73
Mackerel, 61,289 boxes, at $6.07 per box, would be	372,828 65
Cod, 37,758 boxes, at $5.95 per box, would be	225,092 89
Total value	1,058,180 27

In addition to the above there were 137,431 boxes of mackerel captured in Ireland, which were disposed of in markets other than those specified, the value of which, calculated at the same rate, would amount to $836,009.95. This gives a total capture of mackerel of 198,720 boxes, of a total value of $1,208,838.60.

Return of fish other than mackerel and herrings (already dealt with) captured at Kinsale, county of Cork, during the season of 1882, *together with amounts realized.*

Kind.		Quantity.	Value.
Bream	scores	564	$628 99
Hake	do	9,238	35,004 25
Pollock	do	819	2,241 14
Whiting	do	1,963	1,162 12
Cod	do	518	4,023 38
Ling	do	1,283	7,754 52
Conger	do	617	2,764 90
Pilchards	do	32,000	246 25
Turbot	do	78	41 60
Sprats	tons	137½	589 65
Total			$54,456 80

Return of salmon exported from Ireland to English markets during the year 1882, in boxes of 150 pounds each.

	Boxes.
London	4,810
Nottingham	2,011
Bradford	2,0[illegible]
Manchester	5,8[illegible]
Sheffield	2,913
Wolverhampton	2,316
Leeds	2,7[illegible]
Liverpool	5,9[illegible]
Birmingham	4,57[illegible]
Total, 1882	32,8[illegible]
Total, 1881	54,532
Decrease	21,654

Of the above quantity, the value of salmon consigned to Billingsgate market alone (4,810 boxes) amounted to $200,053.29.

Table showing total amount received each year in Ireland from the sale of licenses between the years 1863 and 1882.

1863	$28,675 24
1864	33,292 94
1865	32,716 63
1866	34,544 04
1867	35,608 15
1868	34,428 64
1869	32,604 13
1870	36,555 52
1871	43,145 35
1872	43,789 01
1873	43,996 56
1874	45,828 25
1875	45,837 [illegible]
1876	47,099 49
1877	47,500 69
1878	47,865 19
1879	47,174 38
1880	46,746 33
1881	48,351 10

NEW ZEALAND FISHERIES.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

The fisheries of New Zealand have for many years been a source of profit to the people of this colony.

Whales.—The whale fisheries, it is true, have greatly declined within the last twenty years, principally on account of the use of kerosene and other lubricating oils in place of sperm and whale oil. Last year, however, the whale fisheries yielded a larger income than usual, but there was a great decline in the number of seal-skins exported. The cause of the decline was the rigorous enforcement of the act of Parliament passed some years ago for the protection of the seal fisheries. No one is now allowed to catch seals during the breeding season.

Seals.—There are several varieties of seals found here, including the sea-lion and sea bear, the fur of which forms such a highly-prized article of commerce. The bottlenose seal also frequents these waters.

Ribbon fish.—Amongst the rare fish of New Zealand there is one deserving special notice. It is a species of ribbon fish, and as it is peculiar to this colony, Dr. Van Haast, the eminent scientist in charge of the Colonial Museum at Christchurch, has given it the name of *Regalecus pacificus*. Several specimens of the *Regalecus pacificus* have been caught off the coast of the South Island measuring over 12 feet in length and 13 inches in breadth. The skin of this fish is covered with a coating of frosted silver, which adheres readily to the fingers. The head is a marvel of beauty, and possesses a crest of bright red spines on the top. The dorsal fins consist of a large number of slender rays, which do not project beyond the margin of a thin membrane by which they are united. In one of these fish recently caught the rays stand at a distance of about 3¼ inches from each other. At first they are about an inch high and increase gradually to a height of 2¼ inches.

Sharks.—There are several varieties of sharks here, the skin of which is used in the manufacture of jewelry. The skin when dried and cured takes a polish equal to that of stone, and bears a strong resemblance to the fossil coral porites. The teeth of the shark are prized by the natives of the Ellis Group and other islands of the South Sea for their spears and swords and other weapons of war. The teeth of the shark are serrated or saw-edged. A hole is drilled through the upper part of each tooth, which is then tied to a piece of hardwood by means of a strong fiber. The hilts of swords are protected by cross-pieces with the teeth fastened on them in the same way. These weapons make such frightful wounds that the natives, in order to protect themselves, put on an armor made of rope before going into battle.

Sword-fish.—The sword-fish, common to New Zealand waters, is also worthy of notice. It resembles the mackerel in shape. Two species have been observed. One is the well-known *Xiphias gladius*, to which species the term sword-fish is usually restricted. It seems to be found in most seas and is especially plentiful in the Mediterranean and on some portions of the North American coast. It attains a large size, specimens from 12 to 15 feet in length with a sword 3 feet have been obtained. The sword is formed by the coalescence and extension of certain bones belonging to the upper part of the head. It is flat and oar-shaped, and is usually about 3 inches wide at the base, tapering gradually away to a broad blunt point at the apex. According to Dr. Gunther the sword forms a most formidable weapon. He states that they never hesitate to attack whales and other large cetaceans, and, by repeatedly stabbing these animals, generally retire from the combat victorious. The cause which excites them to these combats is unknown, but they follow the instinct so blindly that they not rarely attack boats or large vessels in a similar manner, evidently mistaking them for cetaceans. Sometimes they actually succeed in piercing the bottom of a ship, endangering its safety, but as they are unable to execute powerful backward movements they cannot always retract their sword, which is broken off by the exertions of the fish to free itself. Dr. Gunther mentions the fact that a piece of a two-inch plank of a whale-boat thus pierced by a sword-fish in which the broken sword still remains is preserved in the British Museum. The flesh of the sword-fish is white, well flavored and nourishing. The tunny fishers of Italy frequently catch sword-fish in their nets, and its flesh is sold by them as readily as that of the tunny. Sword-fish flesh has also recently found its way into the New York markets, the fish being principally harpooned in Long Island Sound. The second species of sword-fish found in New Zealand seas is called *Histiophorus Herschelii*. It is rather smaller than the common species, rarely exceeding 10 feet in length. The sword is much smaller and round instead of being flat.

Not much is known of its habits, but it has been observed at the Cape of Good Hope, as well as in New Zealand. The waters of New Zealand are also frequented by the dolphin and grampus. The countless fiords on the west coast of Otago (in some respects even more remarkable than those of Norway) contain many curious specimens of sea mammalia that have not yet been described on account of the imperfect knowledge existing in regard to them.

THE DUGONG OF QUEENSLAND.

Although the marine mammalia of New Zealand are well represented, its waters have produced no such treasure of the deep as the dugong (*Edicore australis*), found off the coast of Queensland. The oil of the dugong is an article of export, and its medicinal properties resemble those of cod-liver oil. The flesh of the animal is also very palatable and nutritious, and is much relished both by the natives and Europeans, hundreds of whom engage in hunting it. Some of the flesh made into bacon has been brought to New Zealand and pronounced by epicures to be a delicacy. It is said that flesh can be procured from the same animal resembling beef, veal, and pork. The dugong is about the same size and shape as the porpoise, but, unlike the latter, has no dorsal fins. The skin is very thick and makes excellent leather. The bones are large and of the specific gravity of ivory and are susceptible of a very beautiful polish. The eyes, ears, and fins are small, and the tail like that of the whale. The dugong is described as a graminiverous ruminant. By means of its large lips the long blady grass, growing on the banks of the shallow water it frequents, is plucked off and conveyed to the mouth, the upper and lower parts of which are covered with circular tufts of short bristly hair, a wise provision of nature, for without these bristles the blades of grass could not be retained in the mouth. Two tusks on the males protrude from the upper jaw. The females have tusks also, but they do not protrude. The grinders resemble those of ruminating animals, and the stomach is exactly like that of an ox. These peculiarities, together with the metallic sound of the bones, have led many to believe that the dugong is the behemoth of the Bible. The lungs of the dugong are of great length and capacity. The mammals are beneath the fins. In rising to blow the dugong does not show as much of its body as the porpoise. The noise at a distance sounds like that of a turtle.

They not unfrequently measure from 15 to 16 feet in length and from 10 to 12 feet round. Several specimens were recently caught off the coast of Shadbrooke Island, each of which yielded from 200 to 300 pounds of beef and from 10 to 12 gallons of oil. The skin varies from three-fourths of an inch to an inch and a quarter thick, the thickest part being on the back.

Mr. Ching, a chemist in Queensland, has established, in connection with his dugong fishery, a factory for preparing the oil, bacon, and lard for the market. He has been fortunate in obtaining the highest awards at the international exhibitions held at London, Paris, Philadelphia, Sydney, and Melbourne. The mode of catching the dugong is peculiar. It comes in with the tide and feeds on the submarine algæ growing on the mud flats of this coast. Nets are stretched across the deep channels leading to the flats and the fish are entangled in them, and being unable to rise to the surface and get fresh air are literally drowned in their own element. Sometimes they are hunted like whales, with boats and harpoons. The animal when struck with the harpoon, which has a long line tied to it, is allowed to drag the boat after it until exhausted from the loss of blood. The line is then drawn in and the dugong dispatched with a razor-like lance and towed ashore.

EDIBLE FISHES.

Dr. Hector is of the opinion that the various kinds of fish in the New Zealand seas represent the characteristic forms of the southern or Lusitanian province of the European coasts.

Of the thirty-three sea fishes that are used as food in New Zealand *the hapuku*, *tarakihi*, *trevally*, *moki*, *rock cod*, *wrasse*, and *patiki* are found in all parts of the coast of the colony.

The snapper, mullet, and gannet are met with only in the North Island.

The trumpeter, butter fish, and red cod appear to be confined to the south. Of the fish that are pelagic in their habits, and roam over a wide range of ocean, the largest number, such as frost fish, barracoota, horse mackerel, king fish, dory, warehou, mackerel, and gar fish, are visitors, from warmer latitudes.

There are quite as many different kinds of edible fish in New Zealand as are found in Britain. About one hundred and ninety-two New Zealand fishes have been described, some of which are only known from single specimens.

Of one hundred and forty species enumerated by Dr. Hector, sixty-seven are peculiar to New Zealand, seventy-five are common to the coast of Australia, ten are found in New Zealand and other places, but not in the Australian seas.

The following is a table of the various kinds of fish found in the New Zealand market:

Hapuku	*Oligorus gigas.*
Kahawai	*Arripis salar.*
Red Snapper	*Anthias richardsonii.*
Snapper	*Pagrus unicolor.*
Tarakihi	*Chilodactylus macropterus.*
Trumpeter	*Latris hecateia.*
Moki	*Latris ciliaris.*
Frost fish	*Lepidoptus caudatus.*
Barracoota	*Thyrsites atun.*
Horse mackerel	*Trachurus trachurus.*
Trevally	*Caranx georgianus.*
King fish	*Seriola lalandii.*
John Dory	*Zeus faber.*
Boar fish	*Cyttus australis.*
Warehou	*Neptonemus brama.*
Mackerel	*Scomber australasicus.*
Rock cod	*Percis colias.*
Gurnard	*Trigla kumu.*
Mullet	*Mugil perussii.*
Sea mullet	*Agonostoma forsteri.*
Wrasse	*Labrychthis bothryocosmus.*
Butter fish	*Coridodax pullus.*
Haddock	*Gadus australis.*
Red cod	*Lotella bacchus.*
Whiting	*Pseudophycis breviusculus.*
Ling	*Genypterus blacoides.*

Turbot	*Amotrites guntheri.*
Brill	*Pseudorhombus scaphus.*
Flounder patiki	*Rhombosolea monopus.*
Sole	*Peltorhamphus n. zelandiæ.*
Gar fish	*Hemiramphus intermedius*
Grayling	*Prototroctes oxyrhynchus.*
Smelt	*Retropinna richardsoni.*
Kokopu	*Galaxlas fasciatus.*
Minnow	*Galaxas attenuatus.*
Sand eel	*Gonorhynchus greyi.*
Anchovy	*Engraulis encrasicholus.*
Pilchard or sardine	*Clupea sagax.*
Sprat	*Clupea sprattus.*
Eel-tuna	*Anguilla aucklandii.*
Black eel	*Anguilla australis.*
Conger eel	*Conger vulgaris.*
Silver eel	*Congromuræna habentata.*
Leather jacket	*Monacanthus convexirostris.*
Smooth hound	*Mustelus antarcticus.*
Stingaree	*Trigon thalassa.*
Skate	*Raja nasuta.*

Of these fish the hapuku, is always a great favorite. It bears some resemblance to the celebrated Murray cod that inhabits the rivers in the interior of Australia.

The hapuku, however, never enters fresh water, but is a deep-sea fish, although often captured near the coast. Its average weight is about 45 pounds, although specimens have been caught weighing 130 pounds. The head and shoulders are described as being very delicious. The kahawa, often called the native salmon, affords great sport to anglers; they sometimes weigh between 7 and 8 pounds, but the meat is dry in the large size. In the early stage of their growth they are spotted like the trout. The snapper is another very valuable fish. It frequents shallow water and is caught with hook and line. Its average weight is from 4 to 5 pounds. It is remarkable for its abrupt profile and the brilliant metallic luster of its scales.

The trumpeter is the best flavored of all the New Zealand fish, and is very abundant. It is also found in Tasmania and Victoria. The frost fish is often met with in the market. It is not obtained by fishing, but is found after cold frosty nights cast up on the shore by the long roll of ocean swell.

The barracoota, so called from its resemblance to the barracuda pike of the tropical parts of the Atlantic, is found in both islands.

There are three or four kinds of flat fish, all of which are of fine flavor. The tatiki is also a very common fish. The Maoris spear them in clear shallow water; the flesh is tender and delicious. There are some excellent fresh-water fish, such as the upokoro (the native name of the grayling), the kokopu (the family of *Galaxidæ*), *Manguawai*, smelt, and others.

The New Zealand smelt belongs to the true salmonidæ. It was first described by Richardson. Dr. Hector in a very valuable paper on New Zealand salmonoids distinguishes two species of smelt, the manga and the proper smelt. His first acquaintance with these fish was in 1863 at the mouth of the Kaduka River, on the west coast of Otago, in the month of September. He found the Maoris catching them with flax ts. One specimen was 7 inches in length, the smaller variety averaged about 2 inches in length, which he believed to be one of several young fish that are called whitebait. Both the large and small ones are delicious food.

Much interest is felt here in the electrical fishing apparatus of Professor Baird. It is hoped that the Edison light inclosed in a hermetically sealed glass case will be sufficiently protected, so as to resist the pressure of water. It has always been a favorite pastime with the Maoris to search for fish at night by means of a torch. They are not unfrequently found standing in the bows of their boats with a pan resting on their shoulders filled with burning kauri gum, which emits a very beautiful light, and enables them to readily detect the fish, and spear them. Edison's invention for illuminating the surface of the sea, it is said, will shortly be introduced at Wellington and Dunedin. The use of his light on board the new vessels of the Union Steamship Company has given much satisfaction throughout the colony.

AMERICAN SALMON.

The value of Columbia River salmon imported into New Zealand for the year 1882 was $134,905, against $183,500 for the year 1881, showing a decline of $48,595. The collector of customs at Auckland, however, informs me that the value of the imports of American salmon for the quarter ending June 30 is much larger than usual, and that we may reasonably expect that the imports for 1883 will be larger than those of any previous year.

The growth of this industry has been extraordinary. In 1870, the value of the imports of American salmon into New Zealand was only $200. In 1873, the amount increased to $11,795.

The subjoined table shows the value of the imports of American salmon into New Zealand for each year from 1873 to 1882, inclusive:

	Value.
1873	$11,795
1874	48,880
1875	46,925
1876	32,120
1877	71,720
1878	77,515
1879	69,860
1880	71,800
1881	183,500
1882	134,905

EXPORT OF NEW ZEALAND FISH.

The recent successful shipment of a large quantity of New Zealand frozen fish to London by Mr. Williams, of Auckland, will very naturally direct general attention to the fisheries of this colony. During the last few years the exports of dried and preserved fish have steadily increased. There are now twenty-two fish-preserving establishments in New Zealand, but none of them are conducted on a large scale. The total value of the exports of dried and preserved fish during the year 1882 was only $6,965, against $10,650 for the year 1881.

I give below a table showing the value of the exports of dried and preserved fish from the colony of New Zealand for each year from 1873 to 1882, inclusive:

	Value.
1873	$2,300
1874	2,010
1875	1,920

	Value.
1876	$10,176
1877	3,065
1878	3,104
1879	5,310
1880	5,775
1881	10,650
1882	6,950

The common gray mullet (*Mugil perusii*) forms the bulk of these exports. It is found principally in the North Island. It frequents the tidal rivers, going out to sea in summer and returning in the winter. They are caught either with nets or bait. Dr. Hector says that the mullet excels all other New Zealand fish in richness. Australia is the principal market for the mullet, although there is a growing demand for it in the island trade; but it is not as fine a fish as the California salmon, and is not likely to compete successfully with it. A favorite method of preparing the mullet for market is to dry and smoke them. The process is a very simple one. The fish are cleaned and flattened out and smoked for about twenty-four hours. They are then put in a box about 3 feet in length and 18 inches in width, being carefully packed in layers, with a sheet of paper between each layer. The box is then nailed up and ready for export.

Some of the fish-preserving establishments pursue a method of canning similar to that practiced in California. The tins used by them, however, are much heavier and thicker than the American ones. The 1-pound tins of Pease & Co., of Whangarei, have not the graceful, slender shape characteristic of the Cutting Packing Company of San Francisco, and have not the attractive label of the latter.

Mr. Wilson, of Helensville, after many difficulties, succeeded in establishing a small trade for New Zealand tinned mullet, but finally had to abandon it, not being able to compete with the salmon from the United States. The mullet, moreover, has not the bright rich color of the American fish, and is a kind of a dirty white. The wholesale price of the 1-pound tins of Pease & Co.'s mullet is 7 shillings ($1.68) per dozen, whilst the price of the California salmon is 8 shillings ($2.04) per dozen, duty paid. The duty charged on California salmon is 1 penny (2 cents) per pound, or 24 cents per dozen 1-pound tins. This duty, it is thought, will either be repealed or increased. It is certainly not prohibitive, when the superior quality of the California salmon is taken into consideration. The New Zealand duty on smoked, dried, pickled, and salted fish is 2 shillings (48 cents) per hundred-weight.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, July 16, 1883.

FINANCIAL STATISTICS OF NEW ZEALAND.

REPORT BY CONSUL GRIFFIN, OF AUCKLAND.

I have the honor to acknowledge the receipt of Department communication of the 21st February last, written in reference to the coinage production, consumption, import, and export of the precious metals, paper and metallic circulation, &c., of New Zealand.

In reply, I herewith submit the following answers to the questions proposed therein, and such other information as I have been able to obtain in regard to the financial affairs of this colony.

1st. No gold or silver is coined in New Zealand, as no branch of the royal mint has been established here.

2d. The only mints in the Australasian colonies are located at Sydney, New South Wales, and Melbourne, Victoria. These mints issue gold coin only, the silver and bronze coin being obtained from England. On several occasions various members of Parliament have expressed a desire to have a branch of the royal mint established in New Zealand, notwithstanding the expense it would probably be to the colony. The branch mint at Sydney is said to be self-sustaining, but the one at Melbourne, Victoria, is conducted at an annual loss to the people of Victoria. It is generally admitted, however, that the establishment of a mint in New Zealand would have the effect of raising the price of gold paid to the miners.

3d. The value of gold imported into New Zealand during the year ended 31st of December, 1882, was £186,500 ($907,602). The value of the export of gold coin during the same period was £255,029 ($1,241,098.62). The gold bullion imported during the year 1882 was *nil.* The value of gold bullion exported during the same period was £921,664 ($4,485,083.19).

4th. The value of silver coin imported into New Zealand during the year 1882 was £78,820 ($383,577.53). The value of silver coin exported during the same period was £7,514 ($36,566.88). The value of silver bullion imported during the year 1882, *nil.* The value of silver bullion exported during the same period was £1,286, ($6,258.31).

5th. The amount of gold produced by the mines of New Zealand for the year ended December 31, 1882, is set down in the Government returns at 239,893 ounces, valued at £921,664, or $4,485,083.19. The amount of silver produced by the mines of New Zealand during the same period was 5,694 ounces, valued at £1,286 ($6,258.31).

There is, however, no official record kept of the actual output of the mines of the colony. The estimate is therefore formed by the secretary of the gold fields from the quantity and value entered at the customs for export. This estimate should, however, be regarded as a just one, as all the gold produced in the colony is exported except a very small quantity used in the local manufacture of jewelry, and it is believed that the actual quantity used in manufacturing jewelry here would not exceed ten thousand ounces per annum. Gold was discovered in New Zealand long before the islands were annexed to the British Empire.

The American whalers that visited these shores in 1788 reported the existence of gold in the Thames district, and Graffe, the traveler, confirmed their accounts in 1830. Between 1830 and 1840 small quantities of gold were from time to time sent to Sydney from the Thames district. It was not, however, until 1857 that gold became an article of export. At that period and for some years afterwards an export duty of 2 shillings and 6 pence (60 cents) an ounce was charged on it. The duty was changed by an act of Parliament in October, 1872, which is still in force, to 2 shillings (48 cents) per ounce. The total quantity of gold exported from New Zealand since 1857 amounted to 10,056,084 ounces, of the value of $196,717,898.19. I give below a table showing the quantity and value of gold exported from New Zealand for each year since 1857.

Table showing the quantity and value of gold exported from the colony of New Zealand for each year from 1857 *to* 1882, *inclusive.*

Year.	Quantity.	Value.
	Ounces.	
1857	10,436	$202,274
1858	13,533	262,215
1859	7,336	142,145
1860	4,536	87,925
1861	194,234	3,763,365
1862	410,862	7,958,945
1863	628,450	12,158,615
1864	480,170	9,289,235
1865	574,574	11,132,379
1866	735,376	14,230,535
1867	686,753	13,501,375
1868	637,474	12,521,680
1869	614,281	11,814,975
1870	544,880	10,787,925
1871	730,029	13,937,600
1872	445,370	8,654,962
1873	505,337	9,967,135
1874	376,338	7,526,655
1875	355,322	7,038,850
1876	318,367	6,342,735
1877	371,685	7,480,400
1878	310,486	6,200,385
1879	284,100	5,673,396
1880	305,248	6,136,290
1881	350,683	5,403,960
1882	239,893	4,487,063

A novel feature in the history of the export of New Zealand gold is its recent direct shipment to the United States. The gold which hitherto reached America from this country was sent by way of London. The first direct shipment occurred in the month of December, 1881, and this shipment has been followed up by others ever since. This gold is intended to pay for American products purchased in England. The gold reserve of the Bank of England is very much smaller than it was a year ago, and should there be during the present year an increase in the American exports and a decrease in the imports, the flow of gold will still continue in the direction of the United States.

The shipment of Australasian gold to the United States is another illustration of the law of commerce that all commodities tend, sooner or later, to find their way to the point of consumption by the most direct route.

The amount of gold exported from New Zealand to the United States during the year 1882 was $1,360,240 against $503,865 for 1881, showing an increase of $856,385 over the previous year.

The following table shows the composition of the New Zealand gold:

Table showing the composition of gold exported from the various districts of the colony of New Zealand.

Melted gold from west coast, Hokitika, Westland:
Assay: Gold .... .9627 = fine gold, 9 oz. 14 dwts. 16 grs.
Silver .... .1363
Copper .... .0010
Weight, 10 ozs., 2 dwts., 6 grs.

Melted gold from Thames district, province of Auckland:
Assay: Gold .... .6565 = fine gold, 6 oz. 12 dwts. 18 grs.
Silver .... .3390 = silver, 3 oz. 8 dwts. 13 grs.
Copper .... .0045
Weight, 10 ozs., 2 dwts., 6 grs.

Refined gold, as extracted by chlorine refining process and exported by the Bank of New Zealand, Auckland:
Assay: Gold .... .9942 = fine gold, 9 oz. 19 dwts. 20 grs.
Silver .... .0058
Weight, 10 oz., 1 dwt.

6th. The value of silver produced in New Zealand during the year ended December 31, 1882, was £1,286 ($6,258.31). In this connection, I will mention that, although various silver mines exist in the colony, not one of them has ever been successfully worked. The silver produced here is combined with gold, and obtained during the process of refining and preparing the latter metal for market. A few years ago Mr. Miller, one of the officers of the branch of the royal mint at Sydney, discovered a more expeditious and economical method of refining gold and silver than that which had hitherto been in use. He had so far perfected his invention that he succeeded in obtaining letters patent for it in several of the colonies. The Bank of New Zealand being impressed with the great value of the invention purchased the right to use it in all the Australasian colonies. The bank has derived very great advantage from this patent, for through it they are not only enabled to prepare their own gold for the market, but to give a better price for their ore than the other banks, who, without this patent or some similar process, are obliged to send all their unrefined gold to the mint either at Sydney or Melbourne.

The Miller process, besides being an economical and simple one, saves all the silver combined with the gold and destroys all the baser metals.

Much of the gold found in the Thames district is combined with silver, the ore usually yielding about 30 per cent. of the latter metal. Dr. Hector, the colonial geologist, reports that within the last few years several mines have been opened where the ore is *argentiferous galena* that yields 20 to 50 ounces of silver to the ton. In some cases the silver is mixed with iron pyrites that yield a fair percentage of gold. A mine has also been discovered at Richmond Hill, province of Nelson, where the ore is in the form of tetrahedrite, a mixed ore containing silver, antimony, zinc, bismuth, and copper, the silver being from 20 ounces to 1,792 ounces per ton.

The following is an analysis of this ore:

Analysis of silver ore found at Richmond Hill, province of Nelson, New Zealand.

Sulphide of lead	36.12
Sulphide of antimony	22.20
Sulphide of bismuth	Traces.
Sulphide of copper	19.31
Sulphide of iron	13.59
Sulphide of zinc	5.87
Sulphide of silver	2.39
Oxide of manganese	.52

A discovery recently made in a part of the Thames gold-fields district may have an important bearing on the future production of silver in this colony. A piece of quartz from there was shown me by an officer of the Bank of New Zealand, which upon assay was found to contain 81 ounces of gold and 1,225 ounces of silver to the ton of stone. The miners of the Thames district have great faith in finding the rock there equally rich in silver. The most valuable silver mines, however, that have been discovered in New Zealand are located in what is called the King Country, but the Maoris, or aboriginal inhabitants, have hitherto refused to allow them to be worked. The proposition now being discussed by the New Zealand Government to construct a railway through that country, by the western route, would, if carried out, open up for settlement that part of the North Island which has long been regarded, both by the natives and Europeans, as richer in mining treasures than any other in the colony.

Silver was not included in the list of New Zealand exports until 1869, and during that year 11,063 ounces were exported of the value of $14,993. The total quantity of silver entered for export from 1869 to the present time amounted to 383,365 ounces, valued at $502,223.31.

The following is a table showing the quantity and value of silver exported from New Zealand for each year from 1869, when it first became an article of export, up to 1882:

Table showing the quantity and value of silver exported from the colony of New Zealand for each year from 1869 to 1882, inclusive.

Year.	Quantity.	Value.
	Ounces.	
1869	11,063	$14,[illegible]
1870	37,123	5[illegible],9[illegible]
1871	80,279	115,7[illegible]
1872	37,064	49,5[illegible]
1873	36,187	49,2[illegible]
1874	40,566	51,[illegible]
1875	29,085	[illegible]
1876	12,683	15,6[illegible]
1877	33,893	3[illegible],[illegible]
1878	23,019	[illegible]
1879	20,645	[illegible],5[illegible]
1880	20,205	2[illegible],[illegible]
1881	18,885	21,1[illegible]
1882	5,694	6,2[illegible]

7th. There is no coin or money of any kind on deposit in the New Zealand treasury. All payments are made through the Bank of New Zealand, the leading bank of the colony, and the one intrusted with the business of the Government. The banking business of the Government is let by contract. All the banks in the colony are invited to tender for the account, and it is given to the one offering the most favorable terms. At one time the Bank of New Zealand held Government accounts without tender, but a few years ago it was pointed out that more favorable terms could be obtained from other banks, and an act of Parliament was passed requiring that tenders should be called. The Bank of New Zealand obtained the Government account as far back as 1862. The account had previously been kept by the Union Bank of Australia. It was urged that it was the duty of the Government to favor a New Zealand institution, that no foreign bank would study so well the interests of the colony. It was also argued that a branch of any foreign bank would of necessity be made to feel the effects of financial pressure in the country where the main bank was located, and that accommodation would be given or rejected, not according to the requirements of the New Zealand patrons of the bank, but in accordance with the bank's engagements and interests elsewhere. The Government account was therefore transferred to the Bank of New Zealand, which has managed to keep it ever since.

The gold and silver coin are not shown separately in the Government returns, but the amount of coin in the banks and in circulation at the close of the year 1882 was £1,685,180 ($8,200,928.27.) This amount was distributed as follows among the various banks doing business in the colony, viz: Bank of New Zealand, £614,335; Union Bank of Australia (limited), £318,008; Bank of New South Wales, £314,473; Bank of Australasia, £126,546; National Bank of New Zealand (limited), £204,729; Colonial Bank of New Zealand, £106,967. The amount of gold and silver bullion in the banks in the year 1882 was £171,847.

8th. It would be difficult to form a just estimate of the amount of silver in the banks and in circulation in New Zealand, as the returns do not show each kind of coin separately, but include all under the general head of coin.

9th. There is no Government paper currency in circulation in New Zealand. The paper money is issued by the various banks of the colony. Their notes, however, cannot circulate outside of New Zealand, and have to pay a tax of 2 per cent. per annum on the amount issued. The paper money outstanding in the colony at the close of the year 1882 was £967,061 ($4,706,202.35). Of this amount the Bank of New Zealand had £492,150; Union Bank of Australia (limited), £112,722; Bank of New South Wales, £82,441; Bank of Australasia, £64,540; National Bank of New Zealand (limited), £102,616.

The following is a table showing the average amount of the liabilities and assets, notes in circulation, amount of coin, bullion, deposits, rate of dividend, &c., of the various banks doing business in New Zealand for the quarter ended December 31, 1882:

Table showing the average amount of the assets and of the capital and profits, &c., of the various banks of New Zealand for the quarter ended December 31, 1882.

Banks.	LIABILITIES.					
	Notes in circulation.	Bills in circulation.	Balances due to other banks.	Deposits.		Total liabilities.
				Not bearing interest.	Bearing interest.	
Bank of New Zealand	£492, 150	£27, 841	£5, 898	£1, 765, 156	£1, 902, 273	*£4, 642, 315
Union Bank of Australia (limited)	112, 722	16, 768	130	575, 659	818, 876	1, 524, 157
Bank of New South Wales	82, 441	232	3, 942	295, 752	511, 805	894, 174
Bank of Australasia	64, 540	14, 624	116	226, 866	298, 230	604, 378
National Bank of New Zealand (limited)	112, 589	6, 682	11, 916	348, 790	379, 723	859, 703
Colonial Bank of New Zealand	102, 616	2, 805	8, 902	364, 425	340, 511	819, 261
Total	967, 061	68, 956	30, 907	3, 576, 650	4, 251, 420	9, 343, 991

Banks.	ASSETS.				
	Coin.	Bullion.	Notes and bills of other banks.	Balances due from other banks.	Landed property.
Bank of New Zealand	£614, 355	£112, 893	£24, 397	£15, 411	£72, 349
Union Bank of Australia (limited)	318, 008	8, 766	10, 952	3, 564	92, 000
Bank of New South Wales	314, 473	24, 120	1, 719	9, 988	56, 549
Bank of Australasia	126, 646	....	4, 527	33	52, 663
National Bank of New Zealand (limited)	204, 729	15, 470	5, 162	9, 009	75, 249
Colonial Bank of New Zealand	106, 967	10, 596	3, 342	5, 026	39, 322
Total	1, 685, 180	171, 847	50, 100	43, 033	388, 134

Banks.	ASSETS.			
	Notes and bills discounted.	Debts due to the bank.(†)	Securities not included under other heads.	Total assets.
Bank of New Zealand	£2, 018, 918	£4, 743, 861	£152, 585	‡£8, 019, 387
Union Bank of Australia (limited)	730, 989	1, 047, 518	61, 287	2, 273, 087
Bank of New South Wales	256, 136	1, 354, 335	119, 705	2, 137, 028
Bank of Australasia	599, 845	994, 320	1, 772	1, 779, 807
National Bank of New Zealand (limited)	742, 577	1, 097, 186	11, 871	2, 161, 255
Colonial Bank of New Zealand	506, 533	743, 775	65, 012	1, 480, 576
Total	4, 855, 002	9, 980, 997	412, 233	17, 851, 144

---

* Government deposits in Bank of New Zealand amount to £448,994, included in total liabilities.
† Exclusive of debts abandoned as bad.
‡ Government securities amount to £264,615, included in total assets.

Average amount of the assets and of the capital and profits, &c.—Continued.

Banks.	CAPITAL AND PROFITS.			
	Capital paid up.	Rate per annum of last dividend.	Amount of last dividend.	Amount of reserved fund at time of declaring dividend.
		Per cent.		
Bank of New Zealand	£1,000,000	15	£75,000	£684,925
Union Bank of Australia (limited)	1,500,000	16	120,000	964,135
Bank of New South Wales	1,000,000	17	87,500	596,119
Bank of Australasia	1,200,000	12	72,000	453,114
National Bank of New Zealand (limited)	350,000	7	14,000	25,316
Colonial Bank of New Zealand	400,000	7	14,000	49,751
Total	5,450,000	....	382,500	2,772,363

10th. There were no laws passed during the year 1882 directly affecting the coinage or legal-tender character of the metallic and paper circulation of New Zealand.

NEW ZEALAND REVENUE AND EXPENDITURES.

This report would be incomplete without some mention of the public debt and the expenditures and revenue of New Zealand.

The financial year of the colony ends on the 31st March, and the latest figures at my disposal are for the year 1882. I am informed, however, by the honorable colonial treasurer, that the public debt has not materially increased since his last report, and that the expenditures of the colony have been less and the receipts more than his estimates for the financial year March 31, 1883.

On the 31st of March, 1882, the gross indebtedness of the colony on account of loans was $149,738,555, subject to a deduction of $10,332,090 for sinking funds that have accrued. The total expenditures and outstanding liabilities on the 31st of March, 1882, were $72,643,243.22. Prior to the year 1870, the year in which the public works and immigration policy was initiated, the indebtedness of the colony was only $35,320,500. Under the immigration and public works system, the sum of $93,500,000 has been borrowed; $20,000,000 in 1870, $13,750,000 in 1873, $20,000,000 in 1874, $3,750,000 in 1876, $11,000,000 in 1877, and $25,000,000 in 1879. Bills were passed during last session of Parliament, authorizing a loan of $20,000,000; $15,000,000 for railways and public works, and $5,000,000 for the North Island Trunk Railway. It was provided that this money should only be expended at the rate of $5,000,000 a year upon the works specified in the schedule to the act, namely, to complete works already partly constructed. This money was easily obtained in London at a comparatively low rate of interest. The revenue for the year ending March 31, 1882, was $19,026,168. Of this amount $7,350,535 was received at the customs, $4,423,660 from the railways, $725,580 from the post-office, $387,275 telegraphic revenue, and the remainder from property tax, stamps, land transfers, &c. The revenue during the year exceeded the expenditures by more than $1,000,000. The public debt of the colony is certainly very large, but it must be borne in mind that the greater part of it was incurred in the construction of railways and other public works which are owned and managed by the Government. The railways, besides developing the resources of the country, are now practically paying 4 per cent. on the amount expended in their construction. For your further information on the subject of financial affairs of New Zealand, I would respectfully refer you to my special report on "Australasian banking," transmitted to the Department of State in my dispatch No. 147, of the 21st of May last.

G. W. GRIFFIN,
Consul.

UNITED STATES CONSULATE,
Auckland, New Zealand, June 2, 1883.

RAILROADS AND MINES IN CHINA.

REPORT BY CONSUL ZUCK, OF TIENTSIN.

KAIPING MINES AND RAILWAY.

The Kaiping mines are located about 71 miles north-northeast from Tientsin, and the entire distance between the two points is a low treeless plain traversed by numerous rivers and canals. The land at the mines slopes to the south, and on the immediate north are low hills which gradually rise in the distance to a mountain range.

The Chinese Engineering and Mining Company, or what is now commonly known as the "Kaiping Company," was organized some five years since. The present engineering staff is as follows:

C. W. Kinder, chief engineer.
J. M. Molesworth, second engineer.
J. Stenne, third engineer.
E. K. Buttler, chemist and mineralogist.
R. M. Brown, secretary.

The present number of men employed by the company in its various operations is about 1,000, all of whom are Chinese but 20.

The mines have been worked since the year 1877, but the present company only commenced operations about four and a half years ago, when shaft No. 1 was first started and sunk to a depth of 200 feet. It was then stopped and drifts driven through the stone, cutting various coal seams previously exposed by a diamond drill to a depth of 600 feet; after which the up-cast shaft, or No. 2, was started, and sunk to a depth of 300 feet, when another stone drift was driven.

It is the coal lying between these two drifts that is now being worked. In the spring of 1881 work on No. 1 shaft was resumed, and at the time of my visit was down to a depth of 500 feet. Ingersol rock-drills were used when the stone was very hard, but in the softer shales hand labor proved most economical.

Musket powder of excellent quality, manufactured at the Tientsin arsenal, was used for blasting purposes, which was ignited by means of electricity, and as many as sixty holes being fired at one time. Owing to an accident with dynamite the sinkers refused to use it longer in the shafts, which delayed the progress of the work fully one-half. These shafts are 14 feet in diameter, and are walled with limestone taken from the adjacent quarries of the company.

The water met with at times has been very considerable, but the present daily average is not over 40 cubic feet per minute. To prevent delays on account of the water, heavy pumps were provided, consisting of two 20-inch bucket sets and two 20-inch forcing sets, the latter being the top lift. These pumps are worked by two Dany direct-acting differential compound engines of the most recent type.

At the winding shaft No. 1, a horizontal winding engine has been erected capable of drawing 1,000 tons of coal per day. The head pulleys are 12 feet in diameter, and the drum 18 feet, and is manipulated by English winders. At No. 2 shaft a small geared engine is used which raises about 300 tons of coal per day, but will soon be replaced by a direct-acting engine, now being built in the company's shops, the upcast being provided with an air lock.

The ventilation is provided for by a 30-foot Guibal fan, driven by a compound engine, with an auxiliary high-pressure engine which can be attached in case of emergency. The steam for these engines is furnished by eleven boilers.

The repairing shops of the company are much more extensive than are usually required for a colliery, but it must be remembered that owing to the isolated position of the works, and the great necessity for immediate repairs, such works are absolutely necessary. Apart from this the railway, canal, and wharves draw largely upon its capabilities.

Gas is also manufactured by the usual apparatus entirely constructed on the premises. The offices and works are now lighted by gas, and arrangements are now being made to light the mining college, official residences, men's houses, and main street of the village, which is rapidly growing.

The brick works are quite extensive. The preparation of the clay is done by machinery, the molding plant not having arrived at the date of my visit. The hand molding heretofore has not been satisfactory, and has necessitated the use of machinery. It is also the intention of the company to manufacture paving tiles and pottery, for which there is a large demand.

The buildings of the company are mostly built of limestone, red, blue. and white brick. Following the line of the railway northward about a half mile distant from the colliery are found large quarries of limestone. It is intended to use machine drilling and the best appliances to secure a steady output of building stone, for which there is a large demand.

The coal of Kaiping lies at an average dip of 45°, and it consists of several seams divided by shale and sandstone rocks. The stone drifts up to date have already cut twelve seams, seven of which are at present workable. The quality of the coal, when compared with that found in America and England, is without exception inferior, and resembles more closely the coal found on the European continent. It is true that the coal from seam No. 5 is equal to Newcastle in purity, but unfortunately it is too friable to stand rough treatment. It is nevertheless claimed to be a superior coal in every way to that procurable from the far-famed Takashima of Japan. No. 8 is a hard coal, but leaves much ash. The seams now workable vary from 4 to 20 feet in thickness. At the present time, the amount of coal raised is from 250 to 300 tons per day, but on completion of No. 1 shaft an output of 500 tons per day can be very easily maintained. During the winter months a native demand for small coal exists up to 150 tons per day; the superior coal being shipped to Tientsin in the spring. The demand for coal at Tientsin is more than the mine can furnish, and there would be no difficulty in disposing of 500 tons per day.

Coke is also made by a modification of the native process, there being a fair demand for best qualities for foundry and domestic use. During the summer small coal is washed by means of machinery of French type. There is also powerful machinery for the manufacture of compound bricks made from small washed coal for fuel.

RAILROAD.

On the formation of the company it was intended to build a railway either to Pe-Tung or Lutai, a distance of some 30 or 40 miles, but the authorities at Pekin looked upon the project with so much disfavor that the company were compelled to abandon it, and a canal was reluctantly started over the low ground from Lutai to Shu-Kow-Chong, the present terminus of the railroad. It was with great difficulty that the permission to build even this short line of 7 miles was obtained, and had to be laid out several times before the land could be procured, and various obstructions, such as graves, removed. It might be well to state in this connection that the sinuous course of portions of the canal is due to these same causes. This 7 miles of railway was originally laid down for horse tracking, precaution being taken to make the bridges sufficiently strong to carry heavy locomotives at some future time. The question of adopting a light or heavy rail was a difficult one to decide, and unfortunately, as present events now show, a light steel rail of 30 pounds to the yard imported from England was laid. If it had been deemed possible by the company that locomotives could have been so soon permitted heavier rails would have been used. The country traversed by the road is quite level, and required but little grading, and but one creek of any size is crossed, which is spanned by an iron bridge constructed at the works of the company. The road is of the ordinary guage and is ballasted with limestone from Kaiping.

The rolling-stock consists of three ordinary coaches for passenger travel, each of which are divided into two apartments for the accommodation of second and third class passengers, which were imported from England; one first-class passenger coach built at Kaiping, and intended for the use of high officials, and which in point of elegance reminds one of the Pullman palace car; fifty coal trucks, the frames and running gear imported from England and set up and timbered at Kaiping, and having a capacity ranging from 12 to 20 tons.

Engines, three. No. 1, called "The Rocket of China" was built at Kaiping. The history of this, the first locomotive built in China, may be of some interest, especially as it is also the first standard gauge (4 feet 8½ inches) ever used in China. Her dimensions are as follows: 8-inch outside cylinders, 15½-inch stroke; six 30-inch wheels, four coupled; and being hurriedly and hastily built, was not intended for a very long life, but was simply intended as an introduction to more powerful and better engines from abroad. Having safely run about 70,000 miles, doing the whole work of the line for over one year; about September, 1882, engines Nos. 2 and 3 were imported from England, and set up at Kaiping.

Trains.—Six round trips are run daily, time twenty minutes each way. Second and third class passengers pay 5 and 7 cents, respectively, each way. The first-class coach is not in general use, but is run only for high officials, and no fare is charged. The passenger travel pays current running expenses of train. An average of 135 to 150 tons of coal is daily carried over the road, 20 tons of coke, 25 tons of limestone, and with other general freight amounting in the aggregate to some 200 tons per day. There comes up over the road, timber, machinery, and general supplies for the company. At present no outside freight is carried owing to the prejudice of cartmen, or rather it is not deemed advisable to interfere with local cart traffic. The Chinese residing in the vicinity of the road, outside of those whose land was taken, look upon it with much favor, and are disposed to patronize it. The engine is controlled by an English engineer; all other employés are Chinese. All level approaches to the track, such as cart roads, are protected by gates and watchmen or gate-keepers who act as signal men, thus giving a continuous line of signals for the whole track. Midway there is a depot or station house (built of stone and brick), and side track, and it is the intention of the company to run double trains as soon as the quantity of coal is increased. The cost of the railroad cannot be estimated for the reason that it was constructed in connection with the development of the mine, and other improvements at the works, and all accounts also being kept by the Chinese. As has been stated, the present track is being extended about a half or three-fourths of a mile northward to the limestone quarries. It has been often said, why was not the material of the Woosung railroad, purchased by the Chinese, used in the construction of this road? but it is well to remember that the Woosung line had a gauge of only 30 inches, and that there was an intention to use what remained of it in Formosa. It would have been a very grave mistake to have used such a light road, as an extension of the present line is by no means improbable, when the obstruction of the authorities once ceases. There can be but little doubt that the establishment of railways in China may be regarded as a fixed fact, and the present road will be the nucleus of a great system of roads, which will be built in the near future. The fact that the company has expended so much money in the construction of the Lutai canal may delay the extension of the road for a little time, but it must be remembered that the canal was only constructed to meet a pressing necessity, and the railway can be extended in a direct line from Shu-Kow-Chong to Pe-Tung, the seaboard, a distance of 30 miles, and over good ground for its construction.

LUTAI CANAL.

This canal commences at Shu-Kow-Chong, the present terminus of the railway, and extends to Lutai on the south, a distance of 21 miles, connecting with the Pe-Tung River, from whence it derives its water supply. It is 66 feet wide at the top or surface of the ground and 16 feet at the bottom, greatest depth of water 8 feet, and lowest 3 feet. One hundred boats are now being built for the transportation of coal on the canal, and at a cost of $150 each, with a carrying capacity of 25 to 30 tons. These boats are to be towed by steam barges. The canal is crossed at numerous places by bridges constructed of iron, and limestone abutments. The gate to the canal is at Lutai, and is well and substantially constructed, and would be regarded as a very creditable piece of work in any western land.

CHEMICAL AND MINERALOGICAL DEPARTMENT.

This department is located at Kaiping, where the company has but recently erected a number of substantial buildings, built of stone and brick, and furnished with all the modern appliances for assaying and testing ores and metals. A school has also been started in practical chemistry and mineralogy. The class is now composed of seven of the young Chinese students who recently returned from the United States. This department is under the supervision of Prof. E. K. Buttler, of Ohio.

TELEPHONE AND TELEGRAPH.

In April of last year the work of electric communication was inaugurated. The main line of the company from Kaiping to Tientsin, 99 miles, was completed as far as Lutai, a distance of 30 miles from Kaiping, in October, 1882. The remainder is to be finished early in the present season. This line will include five stations, all being on the company's line of coal transit; the approximate cost of line being $100 per mile. The poles are 28 feet in length, of Foochow wood; the wire B. W. G. 8, English; insulators are of English make. This line is to be used in connection with telephones for way stations and telegraph for the termini. The telephones are of the Bell-Edison system; the telegraph on the American plan (closed circuit). The line follows the railroad, Lutai canal, Pe-Tung River, Ku-Tung canal, and the Peiko River to Tientsin. For 27 miles the wires are hung on the poles of the Government lines. The local communication of the company comprises six telephone lines centered in exchange at the main office of the works. These lines are of the average length of about one-half a mile each. System the same as on the main line. These various lines were constructed and are under the management of Prof. E. K. Buttler, the electrical engineer. The labor used in the construction and maintenance of the lines, including operators, being Chinese.

Herewith I also submit, as a part of this report, maps showing the situation, plan of the colliery, and section through stone drifts. These, however, do not show the present condition of things, as many improvements have been made since their publication.

JAS. C. ZUCK,
Consul.

UNITED STATES CONSULATE,
Tientsin, January 30, 1883.

FRENCH WEIGHTS AND MEASURES.

REPORT BY CONSULAR CLERK CHARLES F. THIRION ON CONVERSION OF FRENCH WEIGHTS AND MEASURES INTO UNITED STATES WEIGHTS AND MEASURES.

I have the honor to transmit herewith a series of tables for facilitating the ready conversion of French money, measures, and weights into those of the United States.

I beg leave to submit them to the Department, and I think that they might render some service to the consuls of the United States for the preparation of commercial reports in countries where the metric system of measures and weights has been adopted.

The application of the tables is simple enough, as the following examples will show:

1. To convert 6,834,757.85 francs into dollars.

Francs.	Dollars.
6,000,000.00=	1,158,000 00
834,000.00=	160,962 00
757.00=	146 10
0.85=	0 16
6,834,757.85=	1,319,108 26

2. To reduce 12,345,678 kilograms to pounds avoirdupois.

Kilograms.	Pounds.
12,000,000=	26,455,200
345,000=	760,587
678=	1,495
12,345,678=	27,217,282

3. To reduce 9,876,543 hectoliters to bushels.

Hectoliters.	Bushels.
9,000,000=	237,753,000
876,000=	23,141,292
543=	14,344
9,876,543=	260,908,636

CH. F. THIRION,
Consular Clerk

UNITED STATES CONSULATE-GENERAL,
Paris, September 5, 1883.

LIST OF TABLES HEREWITH.

1. French francs converted into dollars and cents.
2. Kilograms reduced to avoirdupois pounds.
3. Meters reduced to yards.
4. Hectoliters reduced to gallons.
5. Hectoliters reduced to bushels.
6. Hectares reduced to acres.

French francs converted into dollars and cents at the rate of 19.3 *cents per franc.*

Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.
0.05	0.01	58	11.194	135	26.055	212	40.916	289	55.777	366	70.638
0.10	0.02	59	11.387	136	26.248	213	41.109	290	55.970	367	70.831
0.15	0.03	60	11.580	137	26.441	214	41.302	291	56.163	368	71.024
0.20	0.04	61	11.773	138	26.634	215	41,495	292	56.356	369	71.217
0.25	0.05	62	11.966	139	26.827	216	41.688	293	56.549	370	71.410
0.30	0.06	63	12.159	140	27.020	217	41.881	294	56.742	371	71.603
0.35	0.07	64	12.352	141	27.213	218	42.074	295	56.935	372	71.796
0.40	0.08	65	12.545	142	27.406	219	42.267	296	57.128	373	71.939
0.45	0.09	66	12.738	143	27.599	220	42.460	297	57.321	374	72.182
0.50	0.10	67	12.931	144	27 792	221	42.653	298	57.514	375	72.375
0.55	0.11	68	13.124	145	27.985	222	42.846	299	57.707	376	72.568
0.60	0.12	69	13.317	146	28.178	223	43.039	300	57.900	377	72.761
0.65	0.13	70	13.510	147	28.371	224	43.232	301	58.093	378	72.954
0.70	0.14	71	13.703	148	28.564	225	43.425	302	58.286	379	73.147
0.75	0.15	72	13.896	149	28.757	226	43.618	303	58.479	380	73.240
0.80	0.15	73	14.089	150	28.950	227	43.811	304	58.672	381	73.533
0.85	0.16	74	14.282	151	29.143	228	44.004	305	58.865	382	73.726
0.90	0.17	75	14.475	152	29.336	229	44.197	306	59.058	383	73.919
0.95	0.18	76	14.668	153	29.529	230	44.390	307	59.251	384	74.112
1.00	0.19	77	14.861	154	29.722	231	44.583	308	59.444	385	74.305
1	0.193	78	15.054	155	24.915	232	44.776	309	59.637	386	74.498
2	0.386	79	15.247	156	30.108	233	44.969	310	59.830	387	74,691
3	0.579	80	15.440	157	30.301	234	45.162	311	60.023	388	74.884
4	0.772	81	15.633	158	30.494	235	45.355	312	60.216	389	75.077
5	0.965	82	15.826	159	30.687	236	45.548	313	60.409	390	75.270
6	1.158	83	16.019	160	30.880	237	45.741	314	60.602	391	75.463
7	1.351	84	16.212	161	31.073	238	45.934	315	60.795	392	75.656
8	1.544	85	16.405	162	31.266	239	46.127	316	60.988	393	75.849
9	1.737	86	16.598	163	31.459	240	46.320	317	61.181	394	76.042
10	1.930	87	16.791	164	31.652	241	46.513	318	61.374	395	76.235
11	2.123	88	16.984	165	31.845	242	46.706	319	61.567	396	76.428
12	2.316	89	17.177	166	32.038	243	46.899	320	61.760	397	76.621
13	2.509	90	17.370	167	32.231	244	47.092	321	61.953	398	76.814
14	2.702	91	17.563	168	32.424	245	47.285	322	62.146	399	77.007
15	2.895	92	17.756	169	32.617	246	47.478	323	62.339	400	77.200
16	3.088	93	17.949	170	32.810	247	47.671	324	62.532	401	77.393
17	3.281	94	18.142	171	33.003	248	47.864	325	62.725	402	77.586
18	3.474	95	18.335	172	33.196	249	48.057	326	62.918	403	77.779
19	3.667	96	18.528	173	33.389	250	48.250	327	63.111	404	77.972
20	3.860	97	18.721	174	33.582	251	48.443	328	63.304	405	78.165
21	4.053	98	18.914	175	33.775	252	48.636	329	63.497	406	78.358
22	4.246	99	19.107	176	33.968	253	48.829	330	63.690	407	78.551
23	4.439	100	19.300	177	34.161	254	49.022	331	63.883	408	78.744
24	4.632	101	19.493	178	34.354	255	49.215	332	64.076	409	78.937
25	4.825	102	19.686	179	34 547	256	49.408	333	64.269	410	79.130
26	5.018	103	19.879	180	34.740	257	49.601	334	64.462	411	79.323
27	5.211	104	20.072	181	34.933	258	49.794	335	64.655	412	79.516
28	5.404	105	20.265	182	35.126	259	49.987	336	64.848	413	79.709
29	5.597	106	20.458	183	35.319	260	50.180	337	65.041	414	79.902
30	5.790	107	20.651	184	35.512	261	50.373	338	65.234	415	80.095
31	5.983	108	20.844	185	35.705	262	50.566	339	65.427	416	80.288
32	6.176	109	21.037	186	35.898	263	50.759	340	65.620	417	80.481
33	6.369	110	21.230	187	36.091	264	50.952	341	65.813	418	80.674
34	6.562	111	21.423	188	36.284	265	51.145	342	66.006	419	80.867
35	6.755	112	21.616	189	36.477	266	51.338	343	66.199	420	81.060
36	6.948	113	21.809	190	36.670	267	51.531	344	66.392	421	81.253
37	7.141	114	22.002	191	36.863	268	51.724	345	66.585	422	81.446
38	7.334	115	22.195	192	37.056	269	51.917	346	66.778	423	81.639
39	7.527	116	22.388	193	37.249	270	52.110	347	66.971	424	81.832
40	7.720	117	22.581	194	37.442	271	52.303	348	67.164	425	82.025
41	7.913	118	22.774	195	37.635	272	52.496	349	67.357	426	82.218
42	8.106	119	22.967	196	37.828	273	52.689	350	67.550	427	82.411
43	8.299	120	23.160	197	38.021	274	52.882	351	67.743	428	82.604
44	8.492	121	23.353	198	38.214	275	53.075	352	67.936	429	82.797
45	8.685	122	23.546	199	38.407	276	53 268	353	68.129	430	82.990
46	8.878	123	23.739	200	38.600	277	53.461	354	68.322	431	83.183
47	9.071	124	23.932	201	38.793	278	53.654	355	68.515	432	83.376
48	9.204	125	24.125	202	38.986	279	53.847	356	68.708	433	83.569
49	9.457	126	24.318	203	39.179	280	54.040	357	68.901	434	83.762
50	9.650	127	24.511	204	39.372	281	54.233	358	69.094	435	83.955
51	9.843	128	24.704	205	39.505	282	54.426	359	69.287	436	84.148
52	10.036	129	24.897	206	39.758	283	54.619	360	69.480	437	84.341
53	10.229	130	25.090	207	39.951	284	54.818	361	69.673	438	84.534
54	10.422	131	25.283	208	40.144	285	55.005	362	69.866	439	84.727
55	10 615	132	25.476	209	40.337	286	55.198	363	70.059	440	84.920
56	10.808	133	25.669	210	40.530	287	55.391	364	70.252	441	85.113
57	11.001	134	25.862	211	40.723	288	55.584	365	70.445	442	85.306

French francs converted into dollars and cents at the rate of 19.3 *cents per franc*—Cont'd

Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.
443	85.499	520	100.360	597	115.221	674	130.082	751	144.943	828	[illegible]
444	85.692	521	100.553	598	115.414	675	130.275	752	145.136	829	[illegible]
445	85.885	522	100.746	599	115.607	676	130.468	753	145.329	830	[illegible]
446	86.078	523	100.939	600	115.800	677	130.661	754	145.522	831	[illegible]
447	86.271	524	101.132	901	115.993	678	130.854	755	145.715	832	[illegible]
448	86.464	525	101.325	602	116.186	679	131.047	756	145.908	833	[illegible]
449	86.657	526	101.518	603	116.379	680	131.240	757	146.101	834	[illegible]
450	86.850	527	101.711	604	116.572	681	131.433	758	146.294	835	[illegible]
451	87.043	528	101.904	605	116.765	682	131.626	759	146.487	836	[illegible]
452	87.236	529	102.097	606	116.958	683	131.819	760	146.680	837	[illegible]
453	87.429	530	102.290	607	117.151	684	132.012	761	146.873	838	[illegible]
454	87.622	531	102.483	608	117.344	685	132.205	762	147.066	839	[illegible]
455	87.815	532	102.676	609	117.537	686	132.398	763	147.259	840	[illegible]
456	88.008	533	102.869	610	117.730	687	132.591	764	147.452	841	[illegible]
457	88.201	534	103.062	611	117.923	688	132.784	765	147.645	842	[illegible]
458	88.394	535	103.255	612	118.116	689	132.977	766	147.838	843	[illegible]
459	88.587	536	103.448	613	118.309	690	133.170	767	148.031	844	[illegible]
460	88.780	537	103.641	614	118.502	691	133.363	768	148.224	845	[illegible]
461	88.973	538	103.834	615	118.695	692	133.556	769	148.417	846	[illegible]
462	89.166	539	104.027	616	118.888	693	133.749	770	148.610	847	[illegible]
463	89.359	540	104.220	617	119.081	694	133.942	771	148.803	848	[illegible]
464	89.552	541	104.413	618	119.274	695	134.135	772	148.996	849	[illegible]
465	89.745	542	104.606	619	119.467	696	134.328	773	149.189	850	[illegible]
466	89.938	543	104.799	620	119.660	697	134.521	774	149.382	851	[illegible]
467	90.131	544	104.992	621	119.853	698	134.714	775	149.575	852	[illegible]
468	90.324	545	105.285	622	120.046	699	134.907	776	149.768	853	[illegible]
469	90.517	546	105.378	623	120.239	700	135.100	777	149.961	854	[illegible]
470	90.710	547	105.571	624	120.432	701	135.293	778	150.154	855	[illegible]
471	90.903	548	105.764	625	120.625	702	135.486	779	150.347	856	[illegible]
472	91.096	549	105.957	626	120.818	703	135.679	780	150.540	857	[illegible]
473	91.289	550	106.150	627	121.011	704	135.872	781	150.733	858	[illegible]
474	91.482	551	106.343	628	121.204	705	136.065	782	150.926	859	[illegible]
475	91.675	552	106.536	629	121.397	706	136.258	783	151.119	860	[illegible]
476	91.868	553	106.729	630	121.590	707	136.451	784	151.312	861	[illegible]
477	92.061	554	106.922	631	121.783	708	136.644	785	151.505	862	[illegible]
478	92.254	555	107.115	632	121.976	709	136.837	786	151.698	863	[illegible]
479	92.447	556	107.308	633	122.169	710	137.030	787	151.891	864	[illegible]
480	92.640	557	107.501	634	122.362	711	137.223	788	152.084	865	[illegible]
481	92.833	558	107.694	635	122.555	712	137.416	789	152.277	866	[illegible]
482	93.026	559	107.887	636	122.748	713	137.609	790	152.470	867	[illegible]
483	93.219	560	108.080	637	122.941	714	137.802	791	152.663	868	[illegible]
484	93.412	561	108.273	638	123.134	715	137.995	792	152.856	869	[illegible]
485	93.605	562	108.466	639	123.327	716	138.188	793	153.049	870	[illegible]
486	93.798	563	108.659	640	123.520	717	138.381	794	153.242	871	[illegible]
487	93.991	564	108.852	641	123.713	718	138.574	795	153.435	872	[illegible]
488	94.184	565	109.045	642	123.906	719	138.767	796	153.628	873	[illegible]
489	94.377	506	109.238	643	124.099	720	138.960	797	153.821	874	[illegible]
490	94.570	567	109.431	644	124.292	721	139.153	798	154.014	875	[illegible]
491	94.763	568	109.624	645	124.485	722	139.346	799	154.207	876	[illegible]
492	94.956	569	109.817	646	124.678	723	139.539	800	154.400	877	[illegible]
493	95.149	570	110.010	647	124.871	724	139.732	801	154.593	878	[illegible]
494	95.342	571	110.203	648	125.064	725	139.925	802	154.786	879	[illegible]
495	95.535	572	110.396	649	125.257	726	140.118	803	154.979	880	[illegible]
496	95.728	573	110.589	650	125.450	727	140.311	804	155.172	881	[illegible]
497	95.921	574	110.782	651	125.643	728	140.504	805	155.365	882	[illegible]
498	96.114	575	110.975	652	125.836	729	140.697	806	155.558	883	[illegible]
499	96.307	576	111.168	653	126.029	730	140.890	807	155.751	884	[illegible]
500	96.500	577	111.361	654	126.122	731	141.083	808	155.944	885	[illegible]
501	96.693	578	111.554	655	126.415	732	141.276	809	156.137	886	[illegible]
502	96.886	579	111.747	656	126.608	733	141.469	810	156.330	887	[illegible]
503	97.079	580	111.940	657	126.801	734	141.662	811	156.523	888	[illegible]
504	97.272	581	112.133	658	126.994	735	141.855	812	156.716	889	[illegible]
505	97.465	582	112.326	659	127.187	736	142.048	813	156.909	890	[illegible]
506	97.658	583	112.519	660	127.380	737	142.241	814	157.102	891	[illegible]
507	97.851	584	112.712	661	127.573	738	142.434	815	157.295	892	[illegible]
508	98.044	585	112.905	662	127.766	739	142.627	816	157.488	893	[illegible]
509	98.237	586	113.098	663	127.959	740	142.820	817	157.681	894	[illegible]
510	98.430	587	113.291	664	128.152	741	143.013	818	157.874	895	[illegible]
511	98.623	588	113.484	665	128.345	742	143.206	819	158.067	896	[illegible]
512	98.816	589	113.677	666	128.538	743	143.399	820	158.260	897	[illegible]
513	99.009	590	113.870	667	128.731	744	143.592	821	158.453	898	[illegible]
514	99.202	591	114.063	668	128.924	745	143.785	822	158.646	899	[illegible]
515	99.395	592	114.256	669	129.117	746	143.978	823	158.839	900	[illegible]
516	94.588	593	114.449	670	129.310	747	144.171	824	159.032	901	[illegible]
517	99.781	594	114.642	671	129.503	748	144.364	825	159.225	901	[illegible]
518	99.974	595	114.835	672	129.696	749	144.557	826	159.418	903	[illegible]
519	100.167	596	115.028	673	129.889	750	144.750	827	159.611	904	[illegible]

French francs converted into dollars and cents at the rate of 19.3 *cents per franc*—Cont'd.

Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.	Francs.	Dollars.
905	174.665	921	177.753	937	180.841	953	183.929	969	187.017	985	190.105
906	174.858	922	177.946	938	181.034	954	184.122	970	187.210	986	190.298
907	175.051	923	178.139	939	181.227	955	184.315	971	187.403	987	190.491
908	175.244	924	178.332	940	181.420	956	184.508	972	187.596	988	190.684
909	175.437	925	178.525	941	181.613	957	184.701	973	187.789	989	190.877
910	175.630	926	178.718	942	181.806	958	184.894	974	187.982	990	191.070
911	175.823	927	178.911	943	181.999	959	185.087	975	188.175	991	191.263
912	176.016	928	179.104	944	182.192	960	185.280	976	188.368	992	191.456
913	176.209	929	179.297	945	182.385	961	185.473	977	188.561	993	191.649
914	176.402	930	179.490	946	182.578	962	185.666	978	188.754	994	191.842
915	176.595	931	179.683	947	182.771	963	185.859	979	188.947	995	192.035
916	176.788	932	179.876	948	182.964	964	186.052	980	189.140	996	192.228
917	176.981	933	180.069	949	183.157	965	186.245	981	189.333	997	192.421
918	177.174	934	180.262	950	183.350	966	186.438	982	189.526	998	192.614
919	177.367	935	180.455	951	183.543	967	186.631	983	189.719	999	192.807
920	177.560	936	180.648	952	183.736	968	186.824	984	189.912	1000	193.000

Kilograms converted into avoirdupois pounds.

Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.
1	2.205	78	171.959	155	341.713	232	511.467	309	6
2	4.409	79	174.163	156	343.918	233	513.672	310	6
3	6.614	80	176.368	157	346.122	234	515.876	311	6
4	8.818	81	178.573	158	348.327	235	518.081	312	6
5	11.023	82	180.777	159	350.531	236	520.286	313	6
6	13.228	83	182.982	160	352.736	237	522.490	314	6
7	15.432	84	185.186	161	354.941	238	524.595	315	6
8	17.637	85	187.391	162	357.145	239	526.899	316	6
9	19.841	86	189.596	163	359.350	240	529.104	317	6
10	22.046	87	191.800	164	361.554	241	531.309	318	7
11	24.251	88	194.005	165	363.759	242	533.513	319	7
12	26.455	89	196.209	166	365.964	243	535.718	320	7
13	28.660	90	198.414	167	368.168	244	537.922	321	7
14	30.864	91	200.619	168	370.373	245	540.127	322	7
15	33.069	92	202.823	169	372.577	246	542.332	323	7
16	35.274	93	205.028	170	374.782	247	544.536	324	7
17	37.478	94	207.232	171	376.987	248	546.741	325	7
18	39.683	95	209.437	172	379.191	249	548.945	326	7
19	41.887	96	211.642	173	381.396	250	551.150	327	7
20	44.092	97	213.846	174	383.600	251	553.355	328	7
21	46.297	98	216.051	175	385.805	252	555.559	329	7
22	48.501	99	218.255	176	388.010	253	557.764	330	7
23	50.706	100	220.460	177	390.214	254	559.968	331	7
24	52.910	101	222.665	178	392.419	255	562.173	332	7
25	55.115	102	224.869	179	394.623	256	564.378	333	7
26	57.320	103	227.074	180	396.828	257	566.582	334	7
27	59.524	104	229.278	181	399.033	258	568.787	335	7
28	61.729	105	231.483	182	401.237	259	570.991	336	7
29	63.933	106	233.688	183	403.442	260	573.196	337	7
30	66.138	107	235.892	184	405.646	261	575.401	338	7
31	68.343	108	238.097	185	407.851	262	577.605	339	7
32	70.547	109	240.301	186	410.056	263	579.810	340	7
33	72.752	110	242.506	187	412.260	264	582.014	341	7
34	74.956	111	244.711	188	414.465	265	584.219	342	7
35	77.161	112	246.915	189	416.669	266	586.424	343	7
36	79.366	113	249.120	190	418.874	267	588.628	344	7
37	81.570	114	251.324	191	421.079	268	590.833	345	7
38	83.775	115	253.529	192	423.283	269	593.037	346	7
39	85.979	116	255.734	193	425.488	270	595.242	347	7
40	88.184	117	257.938	194	427.692	271	597.447	348	7
41	90.389	118	260.143	195	429.897	272	599.651	349	7
42	92.593	119	262.347	196	432.102	273	601.856	350	7
43	94.798	120	264.552	197	434.306	274	604.060	351	7
44	97.002	121	266.757	198	436.511	275	606.265	352	7
45	99.207	122	268.961	199	438.715	276	608.470	353	7
46	101.412	123	271.166	200	440.920	277	610.674	354	7
47	103.616	124	273.370	201	443.125	278	612.879	355	7
48	105.821	125	275.575	202	445.329	279	615.083	356	7
49	108.025	126	277.780	203	447.534	280	617.288	357	7
50	110.230	127	279.984	204	449.738	281	619.493	358	7
51	112.435	128	282.189	205	451.943	282	621.697	359	7
52	114.639	129	284.393	206	454.148	283	623.902	360	7
53	116.844	130	286.598	207	456.352	284	626.106	361	7
54	119.048	131	288.803	208	458.557	285	628.311	362	7
55	121.253	132	291.007	209	460.761	286	630.516	363	8
56	123.458	133	293.212	210	462.966	287	632.720	364	8
57	125.662	134	295.416	211	465.171	288	634.925	365	8
58	127.867	135	297.621	212	467.375	289	637.129	366	8
59	130.071	136	299.826	213	469.580	290	639.334	367	8
60	132.276	137	302.030	214	471.784	291	641.539	368	8
61	134.481	138	304.235	215	473.989	292	643.743	369	8
62	136.685	139	306.439	216	476.194	293	645.948	370	8
63	138.890	140	308.644	217	478.398	294	648.152	371	8
64	141.094	141	310.849	218	480.603	295	650.357	372	8
65	143.299	142	313.053	219	482.807	296	652.562	373	8
66	145.504	143	315.258	220	485.012	297	654.766	374	8
67	147.708	144	317.462	221	487.217	298	656.971	375	8
68	149.913	145	319.667	222	489.421	299	659.175	376	8
69	152.117	146	321.872	223	491.626	300	661.380	377	8
70	154.322	147	324.076	224	493.830	301	663.585	378	8
71	156.527	148	326.281	225	496.035	302	665.789	379	8
72	158.731	149	328.485	226	498.240	303	667.994	380	8
73	160.936	150	330.690	227	500.444	304	670.198	381	8
74	163.140	151	332.895	228	502.649	305	672.403	382	8
75	165.345	152	335.099	229	504.853	306	674.608	383	8
76	167.550	153	337.304	230	507.058	307	676.812	384	8
77	169.754	154	339.508	231	509.263	308	679.017	385	8

Kilograms converted into avoirdupois pounds—Continued.

Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.
386	850.976	463	1,020.730	540	1,190.484	617	1,360.238	694	1,529.992
387	853.180	464	1,022.934	541	1,192.689	618	1,362.443	695	1,532.197
388	855.385	465	1,025.139	542	1,194.893	619	1,364.647	696	1,534.402
389	857.589	466	1,027.344	543	1,197.098	620	1,366.852	697	1,536.606
390	859.794	467	1,029.548	544	1,199.302	621	1,369.057	698	1,538.811
391	861.999	468	1,031.753	545	1,201.507	622	1,371.261	699	1,541.015
392	864.203	469	1,033.957	546	1,203.712	623	1,373.466	700	1,543.220
393	866.408	470	1,036.162	547	1,205.916	624	1,375.670	701	1,545.425
394	868.612	471	1,038.367	548	1,208.121	625	1,377.875	702	1,547.629
395	870.817	472	1,040.571	549	1,210.325	626	1,380.080	703	1,549.834
396	873.022	473	1,042.776	550	1,212.530	627	1,382.284	704	1,552.038
397	875.226	474	1,044.980	551	1,214.735	628	1,384.489	705	1,554.243
398	877.431	475	1,047.185	552	1,216.939	629	1,386.693	706	1,556.448
399	879.635	476	1,049.390	553	1,219.144	630	1,388.898	707	1,558.652
400	881.840	477	1,051.594	554	1,221.348	631	1,391.103	708	1,560.857
401	884.044	478	1,053.799	555	1,223.553	632	1,393.307	709	1,563.061
402	886.249	479	1,056.003	556	1,225.758	633	1,395.512	710	1,565.266
403	888.454	480	1,058.208	557	1,227.962	634	1,397.716	711	1,567.471
404	890.658	481	1,060.413	558	1,230.167	635	1,399.921	712	1,569.675
405	892.863	482	1,062.617	559	1,232.371	636	1,402.126	713	1,571.880
406	895.068	483	1,064.822	560	1,234.576	637	1,404.330	714	1,574.084
407	897.272	484	1,067.026	561	1,236.781	638	1,406.535	715	1,576.289
408	899.477	485	1,069.231	562	1,238.985	639	1,408.739	716	1,578.494
409	901.681	486	1,071.436	563	1,241.190	640	1,410.944	717	1,580.698
410	903.886	487	1,073.640	564	1,243.394	641	1,413.149	718	1,582.903
411	906.091	488	1,075.845	565	1,245.599	642	1,415.353	719	1,585.107
412	908.295	489	1,078.049	566	1,247.804	643	1,417.558	720	1,587.312
413	910.500	490	1,080.254	567	1,250.008	644	1,419.762	721	1,589.517
414	912.704	491	1,082.459	568	1,252.213	645	1,421.967	722	1,591.721
415	914.909	492	1,084.663	569	1,254.417	646	1,424.172	723	1,593.926
416	917.114	493	1,086.868	570	1,256.622	647	1,426.376	724	1,596.130
417	919.318	494	1,089.072	571	1,258.827	648	1,428.581	725	1,598.335
418	921.523	495	1,091.277	572	1,261.031	649	1,430.785	726	1,600.540
419	923.727	496	1,093.482	573	1,263.236	650	1,432.990	727	1,602.744
420	925.932	497	1,095.686	574	1,265.440	651	1,435.195	728	1,604.949
421	928.137	498	1,097.891	575	1,267.645	652	1,437.399	729	1,607.153
422	930.341	499	1,100.095	576	1,269.850	653	1,439.604	730	1,609.358
423	932.546	500	1,102.300	577	1,272.054	654	1,441.808	731	1,611.563
424	934.750	501	1,104.505	578	1,274.259	655	1,444.013	732	1,613.767
425	936.955	502	1,106.709	579	1,276.463	656	1,446.218	733	1,615.972
426	939.160	503	1,108.914	580	1,278.668	657	1,448.422	734	1,618.176
427	941.364	504	1,111.118	581	1,280.873	658	1,450.627	735	1,620.381
428	943.569	505	1,113.323	582	1,283.077	659	1,452.831	736	1,622.586
429	945.773	506	1,115.528	583	1,285.282	660	1,455.036	737	1,624.790
430	947.978	507	1,117.732	584	1,287.486	661	1,457.241	738	1,626.995
431	950.183	508	1,119.937	585	1,289.691	662	1,459.445	739	1,629.199
432	952.387	509	1,122.141	586	1,291.896	663	1,461.650	740	1,631.404
433	954.592	510	1,124.346	587	1,294.100	664	1,463.854	741	1,633.609
434	956.796	511	1,126.551	588	1,296.305	665	1,466.059	742	1,635.813
435	959.001	512	1,128.755	589	1,298.509	666	1,468,264	743	1,638.018
436	961.206	513	1,130.960	590	1,300.714	667	1,470,468	744	1,640.222
437	963.410	514	1,133.164	591	1,302.919	668	1,472.673	745	1,642.427
438	965.615	515	1,135.369	592	1,305.123	669	1,474.877	746	1,644.632
439	967.819	516	1,137.574	593	1,307.328	670	1,477.082	747	1,646.836
440	970.024	517	1,139.778	594	1,309.532	671	1,479.287	748	1,649.041
441	972.229	518	1,141.983	595	1,311.737	672	1,481.491	749	1,651.245
442	974.433	519	1,144.187	596	1,313.942	673	1,483.696	750	1,653.450
443	976.638	520	1,146.392	597	1,316.146	674	1,485.900	751	1,655.655
444	978.842	521	1,148.597	598	1,318.351	675	1,488.105	752	1,657.859
445	981.047	522	1,150.801	599	1,320.555	676	1,490.310	753	1,660.064
446	983.252	523	1,153.006	600	1,322.760	677	1,492.514	754	1,662.268
447	985.456	524	1,155.210	601	1,324.965	678	1,494.719	755	1,664.463
448	987.661	525	1,157.415	602	1,327.169	679	1,496.923	756	1,666.668
449	989.865	526	1,159.620	603	1,329.374	680	1,499.128	757	1,668.872
450	992.070	527	1,161.824	604	1,331.578	681	1,501.333	758	1,671.077
451	994.275	528	1,164.029	605	1,333.783	682	1,503.537	759	1,673.281
452	996.479	529	1,166.233	606	1,335.988	683	1,505.742	760	1,675.496
453	998.684	530	1,168.438	607	1,338.192	684	1,507.946	761	1,677.701
454	1,000.888	531	1,170.643	608	1,340.397	685	1,510.151	762	1,679.905
455	1,003.093	532	1,172.847	609	1,342.601	686	1,512.356	763	1,682.110
456	1,005.298	533	1,175.052	610	1,344.806	687	1,514,560	764	1,684.314
457	1,007.502	534	1,177.256	611	1,347.011	686	1,516.765	765	1,686.519
458	1,009.707	535	1,179.461	612	1,349.215	689	1,518.969	766	1,688.724
459	1,011.911	536	1,181.666	613	1,351.420	690	1,521.174	767	1,690.928
460	1,014.116	537	1,183.870	614	1,353.624	691	1,523.379	768	1,693,183
461	1,016.321	538	1,186.075	615	1,355.829	692	1.525.583	769	1,695.337
462	1,018.525	539	1,188.279	616	1,358 034	693	1,527.788	770	1,697.542

Kilograms converted into avoirdupois pounds—Continued.

Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.	Kilograms.	Pounds.
771	1,699.747	817	1,801.158	863	1,902.570	909	2,003.981	955	2,105.393
772	1,701.951	818	1,803.363	864	1,904.774	910	2,006.186	956	2,107.598
773	1,704.156	819	1,805.567	865	1,906.979	911	2,008.391	957	2,109.802
774	1,706.360	820	1,807.772	866	1,909.184	912	2,010.595	958	2,112.007
775	1,708.565	821	1,809.977	867	1,911.388	913	2,012.800	959	2,114.211
776	1,710.770	822	1,812.181	868	1,913.593	914	2,015.004	960	2,116.416
777	1,712.974	823	1,814.386	869	1,915.797	915	2,017.209	961	2,118.621
778	1,715.179	824	1,816.590	870	1,918.002	916	2,019.414	962	2,120.825
779	1,717.383	825	1,818.795	871	1,920.207	917	2,021.618	963	2,123.030
780	1,719.588	826	1,820.000	872	1,922.411	918	2,023.823	964	2,125.234
781	1,721.793	827	1,823.204	873	1,924.616	919	2,026.027	965	2,127.439
782	1,723.997	828	1,825.409	874	1,926.820	920	2,028.232	966	2,129.644
783	1,726.202	829	1,827.613	875	1,929.025	921	2,030.437	967	2,131.848
784	1,728.406	830	1,829.818	876	1,931.230	922	2,032.641	968	2,134.053
785	1,730.611	831	1,832.023	877	1,933.434	923	2,034.846	969	2,136.257
786	1,732.816	832	1,834.227	878	1,935.639	924	2,037.050	970	2,138.462
787	1,735.020	833	1,836.432	879	1,937.843	925	2,039.255	971	2,140.667
788	1,737.225	834	1,838.636	880	1,940.048	926	2,041.460	972	2,142.871
789	1,739.429	835	1,840.841	881	1,942.253	927	2,043.664	973	2,145.076
790	1,741.634	836	1,843.046	882	1,944.457	928	2,045.869	974	2,147.280
791	1,743.839	837	1,845.250	883	1,946.662	929	2,048.073	975	2,149.485
792	1,746.043	838	1,847.455	884	1,948.866	930	2,050.278	976	2,151.690
793	1,748.248	839	1,849.659	885	1,951.071	931	2,052.483	977	2,153.894
794	1,750.452	840	1,851.864	886	1,953.276	932	2,054.687	978	2,156.099
795	1,752.657	841	1,854.069	887	1,955.480	933	2,056.892	979	2,158.303
796	1,754.862	842	1,856.273	888	1,957.685	934	2,059.096	980	2,160.508
797	1,757.066	843	1,858.478	889	1,959.889	935	2,061.301	981	2,162.713
798	1,759.271	844	1,860.682	890	1,962.094	936	2,063.506	982	2,164.917
799	1,761.475	845	1,862.887	891	1,964.299	937	2,065.710	983	2,167.122
800	1,763.680	846	1,865.092	892	1,966.503	938	2,067.915	984	2,169.326
801	1,765.885	847	1,867.296	893	1,968.708	939	2,070.119	985	2,171.531
802	1,768.089	848	1,869.501	894	1,970.912	940	2,072.324	986	2,173.736
803	1,770.294	849	1,871.705	895	1,973.117	941	2,074.529	987	2,175.940
804	1,772.498	850	1,873.910	896	1,975.322	942	2,076.733	988	2,178.145
805	1,774.703	851	1,876.115	897	1,977.526	943	2,078.938	989	2,180.349
806	1,776.908	852	1,878.319	898	1,979.731	944	2,081.142	990	2,182.554
807	1,779.112	853	1,880.524	899	1,981.935	945	2,083.347	991	2,184.759
808	1,781.317	854	1,882.728	900	1,984.140	946	2,085.552	992	2,186.963
809	1,783.521	855	1,884.933	901	1,986.345	947	2,087.756	993	2,189.168
810	1,785.726	856	1,887.138	902	1,988.549	948	2,089.961	994	2,191.372
811	1,787.931	857	1,889.342	903	1,990.754	949	2,092.165	995	2,193.577
812	1,790.135	858	1,891.547	904	1,992.958	950	2,094.370	996	2,195.782
813	1,792.340	859	1,893.751	905	1,995.163	951	2,096.575	997	2,197.986
814	1,794.544	860	1,895.956	906	1,997.368	952	2,098.779	998	2,200.191
815	1,796.749	861	1,898.161	907	1,999.572	953	2,100.984	999	2,202.395
816	1,798.954	862	1,900.365	908	2,001.777	954	2,103.188	1,000	2,204.600

Kilograms converted into avoirdupois pounds, American.

Kilograms.	United States pounds.	Kilograms.	United States pounds.	Kilograms.	United States pounds.	Kilograms.	United States pounds.	Kilograms.	United States pounds.
1	2.204600	21	46.296600	41	90.388600	61	134.480600	81	178.572600
2	4.409200	22	48.501200	42	92.593200	62	136.685200	82	180.777200
3	6.613800	23	50.705800	43	94.797800	63	138.889800	83	182.981800
4	8.818400	24	52.910400	44	97.002400	64	141.094400	84	185.186400
5	11.023000	25	55.115000	45	99.207000	65	143.299000	85	187.391000
6	13.227600	26	57.319600	46	101.411600	66	145.503600	86	189.595600
7	15.432200	27	59.524200	47	103.616200	67	147.708200	87	191.800200
8	17.636800	28	61.728800	48	105.820800	68	149.912800	88	194.004800
9	19.841400	29	63.933400	49	108.025400	69	152.117400	89	196.209400
10	22.046000	30	66.138000	50	110.230000	70	154.322000	90	198.414000
11	24.250600	31	68.342600	51	112.434600	71	156.526600	91	200.618600
12	26.455200	32	70.547200	52	114.639200	72	158.731200	92	202.823200
13	28.659800	33	72.751800	53	116.843800	73	160.935800	93	205.027800
14	30.864400	34	74.956400	54	119.048400	74	163.140400	94	207.232400
15	33.069000	35	77.161000	55	121.253000	75	165.345000	95	209.437000
16	35.273600	36	79.365600	56	123.457600	76	167.549600	96	211.641600
17	37.478200	37	81.570200	57	125.662200	77	169.754200	97	213.846200
18	39.682800	38	83.774800	58	127.866800	78	171.958800	98	216.050800
19	41.887400	39	85.979400	59	130.071400	79	174.163400	99	218.255400
20	44.092000	40	88.184000	60	132.276000	80	176.368000	100	220.460000

Meters converted into yards.

Meters.	Yards.	Meters.	Yards.	Meters.	Yards.	Meters.	Yards.	Meters.	Yards.
1	1.094	80	87.490	159	173.886	238	260.282	317	346.678
2	2.187	81	88.583	160	174.979	239	261.375	318	347.772
3	3.281	82	89.677	161	176.073	240	262.469	319	348.865
4	4.374	83	90.771	162	177.167	241	263.563	320	349.959
5	5,468	84	91.864	163	178.260	242	264.656	321	351.053
6	6.562	85	92.938	164	179.354	243	265.750	322	352.146
7	7.655	86	94.051	165	180.447	244	266.844	323	353.240
8	8.749	87	95.145	166	181.541	245	267.937	324	354.333
9	9.842	88	96.239	167	182.635	246	269.031	325	355.427
10	10.936	89	97.332	168	183.728	247	270.124	326	356.521
11	12.030	90	98.426	169	184.822	248	271.218	327	357.614
12	13.123	91	99.520	170	185.916	249	272.312	328	358.708
13	14.217	92	100.613	171	187.009	250	273.405	329	359.801
14	15.310	93	101.707	172	188.103	251	274.499	330	360.895
15	16.404	94	102.800	173	189.196	252	275.593	331	361.989
16	17.498	95	103.894	174	190.290	253	276.686	332	363.082
17	18.591	96	104.988	175	191.384	254	277.780	333	364.176
18	19.685	97	106.081	176	192.477	255	278.873	334	365.270
19	20.778	98	107.175	177	193.571	256	279.967	335	366.363
20	21.872	99	108.268	178	194.664	257	281.061	336	367.457
21	22.966	100	109.362	179	195.758	258	282.154	337	368.550
22	24.060	101	110.456	180	196.852	259	283.248	338	369.644
23	25.153	102	111.549	181	197.946	260	284.342	339	370.738
24	26.247	103	112.643	182	199.039	261	285.435	340	371.831
25	27.340	104	113.737	183	200.133	262	286.529	341	372.925
26	28.434	105	114.830	184	201.226	263	287.622	342	374.019
27	29.528	106	115.924	185	202.320	264	288.716	343	375.112
28	30.621	107	117.017	186	203.414	265	289.810	344	376.206
29	31.715	108	118.111	187	204.507	266	290.903	345	377.300
30	32.809	109	119.205	188	205.601	267	291.997	346	378.393
31	33.902	110	120.298	189	206.694	268	293.090	347	379.487
32	34.996	111	121.392	190	207.788	269	294.184	348	380.580
33	36.089	112	122.486	191	208.882	270	295.278	349	381.674
34	37.183	113	123.579	192	209.975	271	296.371	350	382.768
35	38.277	114	124.673	193	211.069	272	297.465	351	383.861
36	39.370	115	125.766	194	212.163	273	298.559	352	384.955
37	40.464	116	126.860	195	213.256	274	299.652	353	386.048
38	41.557	117	127.954	196	214.350	275	300.746	354	387.142
39	42.651	118	128.947	197	215.443	276	301.839	355	388.236
40	43.745	119	130.142	198	216.537	277	302.933	356	389.329
41	44.838	120	131.235	199	217.631	278	304.027	357	390.423
42	45.932	121	132.328	200	218.724	279	305.120	358	391.516
43	47.026	122	133.422	201	219.818	280	306.214	359	392.610
44	48.119	123	134.515	202	220.912	281	307.308	360	393.703
45	49.213	124	135.609	203	222.005	282	308.401	361	394.797
46	50.306	125	136.703	204	223.099	283	309.495	362	395.891
47	51.400	126	137.796	205	224.192	284	310.589	363	396.985
48	52.494	127	138.890	206	225.286	285	311.682	364	398.078
49	53.587	128	139.983	207	226.380	286	312.776	365	399.172
50	54.681	129	141.077	208	227.473	287	313.869	366	400.265
51	55.775	130	142.171	209	228.567	288	314.963	367	401.359
52	56.868	131	143.264	210	229.661	289	316.057	368	402.453
53	57.962	132	144.358	211	230.754	290	317.150	369	403.546
54	59.055	133	145.452	212	231.848	291	318.244	370	404.640
55	60.149	134	146.545	213	232.941	292	319.338	371	405.734
56	61.243	135	147.639	214	234.035	293	320.431	372	406.827
57	62.336	136	148.732	215	235.129	294	321.525	373	407.921
58	63.430	137	149.826	216	236.222	295	322.618	374	409.014
59	64.523	138	150.920	217	237.316	296	323.712	375	410.108
60	65.617	139	152.013	218	238.409	297	324.806	376	411.202
61	66.711	140	153.107	219	239.503	298	325.899	377	412.295
62	67.804	141	154.201	220	240.597	299	326.993	378	413.389
63	68.898	142	155.294	221	241.690	300	328.086	379	414.482
64	69.992	143	156.388	222	242.784	301	329.180	380	415.576
65	71.085	144	157.481	223	243.878	302	330.274	381	416.676
66	72.179	145	158.575	224	244.971	303	331.367	382	417.764
67	73.272	146	159.669	225	246.065	304	332.461	383	416.857
68	74.366	147	100.762	226	247.158	305	333.555	384	419.951
69	75.460	148	161.856	227	248.252	306	334.648	385	421.044
70	76.553	149	162.949	228	249.346	307	335.742	386	422.138
71	77.647	150	164.043	229	250.439	308	336.835	387	423.232
72	78.741	151	165.137	230	251.533	309	337.929	388	424.325
73	79.834	152	166.230	231	252.627	310	339.023	389	425.419
74	80.928	153	167.324	232	253.720	311	340.116	390	426.513
75	82.021	154	168.418	233	254.814	312	341.210	391	427.606
76	83.115	155	169.511	234	255.907	313	342.304	392	428.700
77	84.209	156	170.605	235	257.001	314	343.397	393	429.793
78	85.302	157	171.698	236	258.095	315	344.491	394	430.887
79	86.396	158	172.792	237	259.188	316	345.584	395	431.980

Meters converted into yards—Continued.

Meters.	Yards.	Meters.	Yards.	Meters.	Yards.	Meters.	Yards.	Meters.	Yards.
396	433.074	475	519.470	554	605.866	633	692.263	712	778.65
397	434.168	476	520.564	555	606.960	634	693.356	713	779.74
398	435.261	477	521.657	556	608.054	635	694.450	714	780.84
399	436.355	478	522.751	557	609.147	636	695.544	715	781.94
400	437.449	479	523.845	558	610.241	637	696.637	716	783.03
401	438.542	480	524.939	559	611.334	638	697.731	717	784.12
402	439.636	4-1	526.032	560	612.428	639	698.824	718	785.22
403	440.730	482	527.126	561	613.522	640	699.918	719	786.31
404	441.823	483	528.219	562	614.615	641	701.012	720	787.40
405	442.917	484	529.313	563	615.709	642	702.105	721	788.50
406	444.010	485	530.407	564	616.803	643	703.199	722	789.59
407	445.104	486	531.500	565	617.896	644	704.293	723	790.69
408	446.198	487	532.594	566	618.990	645	705.386	724	791.78
409	447.291	488	533.687	567	620.083	646	706.480	725	792.87
410	448.385	489	534.781	568	621.177	647	707.573	726	793.96
411	449.479	490	535.875	569	622.271	648	708.667	727	795.06
412	450.572	491	536.968	570	623.364	649	709.761	728	796.15
413	451.666	492	538.062	571	624.458	650	710.854	729	797.25
414	452.759	493	539.156	572	625.552	651	711.948	730	798.34
415	453.853	494	540.249	573	626.645	652	713.042	731	799.43
416	454.947	495	541.343	574	627.739	653	714.135	732	800.53
417	456.040	496	542.436	575	628.832	654	715.229	733	801.62
418	457.134	497	543.530	576	629.926	655	716.322	734	802.71
419	468.227	498	544.624	577	634.020	656	717.416	735	803.81
420	459.321	499	545.717	578	632.113	657	718.510	736	804.90
421	460.415	500	546.811	579	633.207	658	719.603	737	805.99
422	461.508	501	547.905	580	634.301	659	720.697	738	807.09
423	462.602	502	548.998	581	635.394	660	721.790	739	808.18
424	463.696	503	550.092	582	636.488	661	722.884	740	809.28
425	464.789	504	551.185	583	637.582	662	723.978	741	810.37
426	465.883	505	532.279	584	638.675	663	725.071	742	811.46
427	466.976	506	553.373	585	639.769	664	726.165	743	812.56
428	468.070	507	554.466	586	640.862	665	727.259	744	813.65
429	469.164	508	555.560	587	641.956	666	728.352	745	814.74
430	470.257	509	556.653	588	643.050	667	729.446	746	815.84
431	471.351	510	557.747	589	644.143	668	730.539	747	816.93
432	472.445	511	558.841	590	645.237	669	731.633	748	818.02
433	473.538	512	559.934	591	646.331	670	732.727	749	819.12
434	474.632	513	561.028	592	647.424	671	733.820	750	820.21
435	475.725	514	562.122	593	648.518	672	734.914	751	821.31
436	476.819	515	563.215	594	649.611	673	736.008	752	822.40
437	477.913	516	564.309	595	650.705	674	737.101	753	823.49
438	479.006	517	565.402	596	651.799	675	738.195	754	824.59
439	480.100	518	566.496	597	652.892	676	739.288	755	825.68
440	481.194	519	567.590	598	653.986	677	740.382	756	826.77
441	482.287	520	568.683	599	655.079	678	741.476	757	827.87
442	483.381	521	569.777	600	656.173	679	742.569	758	828.96
443	484.474	522	570.871	601	657.267	680	743.663	759	830.05
444	485.568	523	571.964	602	658.360	681	744.757	760	831.15
445	486.662	524	573.058	603	659.454	682	745.850	761	832.24
446	487.755	525	574.151	604	660.548	683	746.944	762	833.34
447	488.849	526	575.245	605	661.641	684	748.037	763	834.43
448	489.942	527	576.339	606	662.735	685	749.131	764	835.52
449	491.036	528	577.432	607	663.828	686	750.225	765	836.62
450	492.130	529	578.526	608	664.922	687	751.318	766	837.71
451	493.223	530	579.620	609	666.016	688	752.412	767	838.80
452	494.317	531	580.713	610	667.109	689	753.505	768	839.90
453	495.411	532	581.807	611	668.203	690	754.599	769	840.99
454	496.504	533	582.900	612	669.297	691	755.693	770	842.08
455	497.598	534	533.994	613	670.390	692	756.786	771	843.18
456	498.691	535	585.088	614	671.484	693	757.880	772	844.27
457	499.785	536	586.181	615	672.577	694	758.974	773	845.37
458	500.879	537	587.275	616	673.671	695	760.067	774	846.46
459	501.972	538	588.368	617	674.765	696	761.161	775	847.55
460	503.066	539	589.462	618	675.858	697	762.254	776	848.65
461	504.160	540	590.556	619	676.952	698	763.348	777	849.74
462	505.253	541	591.649	620	678.046	699	764.442	778	850.83
463	506.347	542	592.743	621	679.139	700	765.535	779	851.93
464	507.440	543	593.837	622	680.233	701	766.629	780	853.02
465	508.534	544	594.930	623	681.326	702	767.723	781	854.11
466	509.628	545	596.024	624	682.420	703	768.816	782	855.21
467	510.721	546	597.117	625	683.514	704	769.910	783	856.30
468	511.815	547	598.211	626	684.607	705	771.003	784	857.40
469	512.908	548	599.305	627	685.701	706	772.097	785	858.49
470	514.002	549	600.398	628	686.794	707	773.191	786	859.58
471	515.096	550	601.492	629	687.888	708	774.284	787	860.68
472	516.189	551	602.586	630	688.982	709	775.378	788	861.77
473	517.283	552	603.679	631	690.076	710	776.472	789	862.86
474	518.377	553	604.773	632	691.169	711	777.565	790	863.96

Meters converted into yards—Continued.

Meters.	Yards.	Meters.	Yards.	Meters.	Yards.	Meters.	Yards.	Meters.	Yards.
791	865.055	833	910.987	875	956.919	917	1,002.851	959	1,048.783
792	866.149	834	912.081	876	958.018	918	1,003.945	960	1,049.877
793	867.242	835	913.174	877	959.106	919	1,005.038	961	1,050.971
794	868.336	836	914.268	878	960.200	920	1,006.132	962	1,052.064
795	869.429	837	915.362	879	961.294	921	1,007.226	963	1,053.158
796	870.523	838	916.455	880	962.387	922	1,008.319	964	1,054.252
797	871.617	839	917.549	881	963.481	923	1,009.413	965	1,055.345
798	872.710	840	918.642	882	964.575	924	1,010.507	966	1,056.439
799	873.804	841	919.736	883	965.668	925	1,011.600	967	1,057.532
800	874.898	842	920.830	884	966.762	926	1,012.694	968	1,058.626
801	875.991	843	921.923	885	967.855	927	1,013.787	969	1,059.720
802	877.085	844	923.017	886	968.949	928	1,014.881	970	1,060.813
803	878.178	845	924.110	887	970.043	929	1,015.975	971	1,061.907
804	879.272	846	925.204	888	971.136	930	1,017.068	972	1,063.001
805	880.366	847	926.298	889	972.230	931	1,018.162	973	1,064.094
806	881.459	848	927.391	890	973.324	932	1,019.256	974	1,065.188
807	882.553	849	928.485	891	974.417	933	1,020.349	975	1,066.281
808	883.646	850	929.579	892	975.511	934	1,021.443	976	1,067.375
809	884.740	851	930.672	893	976.604	935	1,022.536	977	1,068.469
810	885.834	852	931.766	894	977.698	936	1,023.630	978	1,069.562
811	886.927	853	932.860	895	978.792	937	1,024.724	979	1,070.656
812	888.021	854	933.953	896	979.885	938	1,025.817	980	1,071.750
813	889.115	855	934.047	897	980.979	939	1,026.911	981	1,072.843
814	890.208	856	935.140	898	982.072	940	1,028.005	982	1,073.937
815	891.302	857	937.234	899	983.166	941	1,029.098	983	1,075.030
816	892.395	858	938.328	900	984.260	942	1,030.192	984	1,076.124
817	893.489	859	939.421	901	985.353	943	1,031.286	985	1,077.218
818	894.583	860	940.515	902	986.447	944	1,032.379	986	1,078.311
819	395.676	861	941.609	903	987.541	945	1,033.473	987	1,079.405
820	896.770	862	942.702	904	988.634	946	1,034.566	988	1,080.498
821	897.864	863	943.796	905	989.728	947	1,035.660	989	1,081.592
822	898.957	864	944.889	906	990.821	948	1,036.753	990	1,082.686
823	900.051	865	945.983	907	991.915	949	1,037.847	991	1,083.779
824	901.144	866	947.077	908	993.009	950	1,038.941	992	1,084.873
825	902.238	867	948.170	909	994.102	951	1,040.035	993	1,085.967
826	903.332	868	949.264	910	995.198	952	1,041.128	994	1,087.060
827	904.425	869	950.357	911	996.290	953	1,042.222	995	1,088.154
828	905.519	870	951.451	912	997.383	954	1,043.315	996	1,089.247
829	906.612	871	952.545	913	998.477	955	1,044.409	997	1,090.341
830	907.706	872	953.638	914	999.570	956	1,045.503	998	1,091.435
831	908.800	873	954.732	915	1,000.664	957	1,046.596	999	1,092.528
832	909.894	874	955.826	916	1,001.758	958	1,047.690	1000	1,093.622

1	1.093622	21	22.966062	41	44.838502	61	66.710942	81	88.583382
2	2.187244	22	24.059684	42	45.932124	62	67.804564	82	89.677004
3	3.280866	23	25.153306	43	47.025746	63	68.898186	83	90.770626
4	4.374488	24	26.246928	44	48.119368	64	69.991808	84	91.864248
5	5.468110	25	27.340550	45	49.212990	65	71.085430	85	92.957870
6	6.561732	26	28.434172	46	50.306612	66	72.179052	86	94.051492
7	7.655354	27	29.527794	47	51.400234	67	73.272674	87	95.145114
8	8.748976	28	30.621416	48	52.493856	68	74.366296	88	96.238736
9	9.842598	29	31.715038	49	53.587478	69	75.459918	89	97.332358
10	10.936220	30	32.808660	50	54.681100	70	76.553540	90	98.425980
11	12.029842	31	33.902282	51	55.774722	71	77.647162	91	99.519602
12	13.123464	32	34.995904	52	56.868344	72	78.740784	92	100.613224
13	14.217086	33	36.089526	53	57.961966	73	79.834406	93	101.706846
14	15.310708	34	37.183148	54	59.055588	74	80.928028	94	102.800468
15	16.404330	35	38.276770	55	60.149210	75	82.021650	95	103.894090
16	17.497952	36	39.370392	56	61.242832	76	83.115272	96	104.987712
17	18.591574	37	40.464014	57	62.336454	77	84.208894	97	106.081334
18	19.685196	38	41.557636	58	63.430076	78	85.302516	98	107.174956
19	20.778818	39	42.651258	59	64.523698	79	86.396138	99	108.268578
20	21.872440	40	43.744880	60	65.617320	80	87.489760	100	109.362200

Hectoliters reduced to bushels.

Hectoliters.	Bushels.	Hectoliters.	Bushels.	Hectoliters.	Bushels.	Hectoliters.	Bushels.	Hectoliters.	Bu
1	2.838	78	221.348	155	439.859	232	658.370	309	
2	5.676	79	224.186	156	442.697	233	661.207	310	
3	8.513	80	227.024	157	445.535	234	664.045	311	
4	11.351	81	229.862	158	448.372	235	666.883	312	
5	14.189	82	232.700	159	451.210	236	669.721	313	
6	17.027	83	235.537	160	454.048	237	672.559	314	
7	19.865	84	238.375	161	456.886	238	675.396	315	
8	22.702	85	241.213	162	459.724	239	678.234	316	
9	25.540	86	244.051	163	462.561	240	681.072	317	
10	28.378	87	246.889	164	465.399	241	683.910	318	
11	31.216	88	249.726	165	468.237	242	686.748	319	
12	34.054	89	252.564	166	471.075	243	689.585	320	
13	36.891	90	255.402	167	473.913	244	692.423	321	
14	39.729	91	258.240	168	476.750	245	695.261	322	
15	42.567	92	261.078	169	479.588	246	698.099	323	
16	45.405	93	263.915	170	482.426	247	700.937	324	
17	48.243	94	266.753	171	485.264	248	703.774	325	
18	51.080	95	269.591	172	488.102	249	706.612	326	
19	53.918	96	272.429	173	490.939	250	709.450	327	
20	56.756	97	275.267	174	493.777	251	712.288	328	
21	59.594	98	278.104	175	496.615	252	715.126	329	
22	62.432	99	280.942	176	499.453	253	717.963	330	
23	65.269	100	283.780	177	502.291	254	720.801	331	
24	68.107	101	286.618	178	505.128	255	723.639	332	
25	70.945	102	289.456	179	507.966	256	726.477	333	
26	73.783	103	292.293	180	510.804	257	729.315	334	
27	76.621	104	295.131	181	513.642	258	732.152	335	
28	79.458	105	297.969	182	516.480	259	734.990	336	
29	82.296	106	300.807	183	519.317	260	737.828	337	
30	85.135	107	303.645	184	522.155	261	740.666	338	
31	87.972	108	306.482	185	524.993	262	743.504	339	
32	90.810	109	309.320	186	527.831	263	746.341	340	
33	93.647	110	312.158	187	530.669	264	749.179	341	
34	96.485	111	314.996	188	533.506	265	752.017	342	
35	99.323	112	317.834	189	536.344	266	754.855	343	
36	102.161	113	320.671	190	539.182	267	757.693	344	
37	104.999	114	323.509	191	542.020	268	760.530	345	
38	107.836	115	326.347	192	544.858	269	763.368	346	
39	110.674	116	329.185	193	547.695	270	766.206	347	
40	113.512	117	332.023	194	550.533	271	769.044	348	
41	116.350	118	334.860	195	553.371	272	771.882	349	
42	119.188	119	337.698	196	556.209	273	774.719	350	
43	122.025	120	340.536	197	559.047	274	777.557	351	
44	124.863	121	343.374	198	561.884	275	780.395	352	
45	127.701	122	346.212	199	564.722	276	783.233	353	1,
46	130.539	123	349.049	200	567.560	277	786.071	354	1,
47	133.377	124	351.887	201	570.398	278	788.908	355	1,
48	136.214	125	354.725	202	573.236	279	791.746	356	1,
49	139.052	126	357.563	203	576.073	280	794.584	357	1,
50	141.890	127	360.401	204	578.911	281	797.422	358	1,
51	144.728	128	363.238	205	581.749	282	800.260	359	1,
52	147.566	129	366.076	206	584.587	283	803.097	360	1,
53	150.403	130	368.914	207	587.425	284	805.935	361	1,
54	153.241	131	371.752	208	590.262	285	808.773	362	1,
55	156.079	132	374.590	209	593.100	286	811.611	363	1,
56	158.917	133	377.427	210	595.938	287	814.449	364	1,
57	161.755	134	380.265	211	598.776	288	817.286	365	1,
58	164.592	135	383.103	212	601.614	289	820.124	366	1,
59	167.430	136	385.941	213	604.451	290	822.962	367	1,
60	170.268	137	388.779	214	607.289	291	825.800	368	1,
61	173.106	138	391.616	215	610.127	292	828.638	369	1,
62	175.944	139	394.454	216	612.965	293	831.476	370	1,
63	178.781	140	397.292	217	615.803	294	834.313	371	1,
64	181.619	141	400.130	218	618.640	295	837.151	372	1,
65	184.457	142	402.968	219	621.478	296	839.989	373	1,
66	187.295	143	405.805	220	624.316	297	842.827	374	1,
67	190.133	144	408.643	221	627.154	298	845.665	375	1,
68	192.970	145	411.481	222	629.992	299	848.502	376	1,
69	195.808	146	414.319	223	632.829	300	851.340	377	1,
70	198.646	147	417.157	224	635.667	301	854.178	378	1,
71	201.484	148	419.994	225	638.505	302	857.016	379	1,
72	204.322	149	422.832	226	641.343	303	859.853	380	1,
73	207.159	150	425.670	227	644.181	304	862.691	381	1,
74	209.997	151	428.508	228	647.018	305	865.529	382	1,
75	212.835	152	431.346	229	649.856	306	868.367	383	1,
76	215.673	153	434.183	230	652.694	307	871.205	384	1,
77	218.511	154	437.021	231	655.532	308	874.042	385	1,

Hectoliters reduced to bushels—Continued.

Hectoliters.	Bushels.	Hectoliters.	Bushels	Hectoliters.	Bushels.	Hectoliters.	Bushels.	Hectoliters.	Bushels.
386	1, 095. 391	463	1, 313. 901	540	1, 532. 412	617	1, 750. 923	694	1, 969. 433
387	1, 098. 229	464	1, 316. 739	541	1, 535. 250	618	1, 753. 760	695	1, 972. 271
388	1, 101. 066	465	1, 319. 577	542	1, 538. 088	619	1, 756. 598	696	1, 975. 109
389	1, 103. 904	466	1, 322. 415	543	1, 540. 925	620	1, 759. 436	697	1, 977. 947
390	1, 106. 742	467	1, 325. 253	544	1, 543. 763	621	1, 762. 274	698	1, 980. 784
391	1, 109. 580	468	1, 328. 090	545	1, 546. 601	622	1, 765. 112	699	1, 983. 622
392	1, 112. 418	469	1, 330. 928	546	1, 549. 439	623	1, 767. 949	700	1, 986. 460
393	1, 115. 255	470	1, 333. 766	547	1, 552. 277	624	1, 770. 787	701	1, 989. 298
394	1, 118. 093	471	1, 336. 604	548	1, 555. 114	625	1, 773. 625	702	1, 992. 136
395	1, 120. 931	472	1, 339. 442	549	1, 557. 952	626	1, 776. 463	703	1, 994. 973
396	1, 123. 769	473	1, 342. 279	550	1, 560. 790	627	1, 779. 301	704	1, 997. 811
397	1, 126. 607	474	1, 345. 117	651	1, 563. 628	628	1, 782. 138	705	2, 000. 649
398	1, 129. 444	475	1, 347. 955	552	1, 566. 466	629	1, 784. 976	706	2, 003. 487
399	1, 132. 282	476	1, 350. 793	553	1, 569. 303	630	1, 787. 814	707	2, 006. 325
400	1, 135. 120	477	1, 353. 631	554	1, 572. 141	631	1, 790. 652	708	2. 009. 162
401	1, 137. 958	478	1, 356. 468	555	1, 574. 979	632	1, 793. 490	709	2, 012. 000
402	1, 140. 796	479	1, 359. 306	556	1, 577. 817	633	1, 796. 327	710	2, 014. 838
403	1, 143. 633	480	1, 362. 144	557	1, 580. 655	634	1, 799. 165	711	2, 017. 676
404	1, 146. 471	481	1, 364. 982	558	1, 583. 492	635	1, 802. 003	712	2, 020. 514
405	1, 149. 309	482	1, 367. 820	559	1, 586. 330	636	1, 804. 841	713	2, 023. 351
406	1, 152. 147	483	1, 370. 657	560	1, 589. 168	637	1, 807. 679	714	2, 026. 189
407	1, 154. 985	484	1, 373. 495	561	1, 592. 006	638	1, 810. 516	715	2, 029. 027
408	1, 157. 822	485	1, 376. 333	562	1, 594. 844	639	1, 813. 354	716	2, 031. 865
409	1, 160. 660	486	1, 379. 171	563	1, 597. 681	640	1, 816. 192	717	2, 034. 703
410	1, 163. 498	487	1, 382. 009	564	1, 600. 519	641	1, 819. 030	718	2, 037. 540
411	1, 166. 336	488	1, 384. 846	565	1, 603. 357	642	1, 821. 868	719	2, 040. 378
412	1, 169. 174	489	1, 387. 684	566	1, 606. 195	643	1, 824. 705	720	2, 043. 216
413	1, 172. 011	490	1, 390. 522	567	1, 609. 033	644	1, 827. 543	721	2, 046. 054
414	1, 174. 849	491	1, 393. 360	568	1, 611. 870	645	1, 830. 381	722	2, 048. 892
415	1, 177. 687	492	1, 396. 198	569	1, 614. 708	646	1, 833. 219	723	2, 051. 729
416	1, 180. 525	493	1, 399. 035	570	1, 617. 546	647	1, 836. 057	724	2, 054. 567
417	1, 183. 363	494	1, 401. 873	571	1, 620. 384	648	1, 838. 894	725	2, 057. 405
418	1, 186. 200	495	1, 404. 71[illegible]	572	1, 623. 222	649	1, 841. 732	726	2, 060. 243
419	1, 189. 038	496	1, 407. 549	573	1, 626. 059	650	1, 844. 570	727	2, 063. 081
420	1, 191. 876	497	1, 410. 387	574	1, 628. 897	651	1, 847. 408	728	2, 065. 918
421	1, 194. 714	498	1, 413. 224	575	1, 631. 735	652	1, 850. 246	729	2, 068. 756
422	1, 197. 552	499	1, 416. 062	576	1, 634. 573	653	1, 853. 083	730	2, 071. 594
423	1, 200. 389	500	1, 418. 900	577	1, 637. 411	654	1, 855. 921	731	2, 074. 432
424	1. 203. 227	501	1, 421. 738	578	1, 640. 248	655	1, 858. 759	732	2, 077. 270
425	1, 206. 065	502	1, 424. 576	579	1, 643. 086	656	1, 861. 597	733	2, 080. 107
426	1, 208. 903	503	1, 427. 413	580	1, 645. 924	657	1, 864. 435	734	2, 082. 945
427	1, 211. 741	504	1, 430. 251	581	1, 648. 762	658	1, 867. 272	735	2, 085. 783
428	1,214. 578	505	1, 433. 089	582	1, 651. 600	659	1, 870. 110	736	2, 088. 621
429	1, 217. 416	506	1, 435. 927	583	1, 654. 437	660	1. 872. 948	737	2, 091. 459
430	1, 220. 254	507	1, 438. 765	584	1, 657. 275	661	1, 875. 786	738	2, 094. 296
431	1, 223. 092	508	1, 441. 602	585	1, 660. 113	662	1, 878. 624	739	2, 097. 134
432	1, 225. 930	509	1, 444. 440	586	1, 662. 951	663	1, 881. 461	740	2, 090. 972
433	1, 228. 767	510	1, 447. 278	587	1, 665. 789	664	1, 884. 299	741	2, 102. 810
434	1, 231. 605	511	1, 450. 116	588	1, 668. 626	665	1, 887. 137	742	2, 105. 648
435	1, 234. 443	512	1, 452. 954	589	1, 671. 464	666	1, 889. 975	743	2, 108. 485
436	1, 237. 281	513	1, 455. 791	590	1, 674. 302	667	1, 892. 813	744	2, 111. 328
437	1, 240. 119	514	1, 458. 629	591	1, 677. 140	668	1, 895. 650	745	2, 114. 161
438	1, 242. 956	515	1, 461. 467	592	1, 679. 978	669	1, 898. 488	746	2, 116. 999
439	1, 245. 794	516	1, 464. 305	593	1, 682. 815	670	1, 901. 326	747	2, 119. 837
440	1, 248. 632	517	1, 467. 143	594	1, 685. 653	671	1, 904. 164	748	2, 122. 674
441	1, 251. 470	518	1, 469. 980	595	1, 688. 491	672	1, 907. 002	749	2, 125. 512
442	1, 254. 308	519	1, 472. 818	596	1, 691. 329	673	1, 909. 839	750	2, 128. 350
443	1, 257. 145	520	1, 475. 656	597	1, 694. 167	674	1, 912. 677	751	2, 131. 188
444	1, 259. 983	521	1, 478. 494	598	1, 697. 004	675	1, 915. 515	752	2, 134. 026
445	1, 262. 821	522	1, 481. 332	599	1, 699. 842	676	1, 918. 353	753	2, 136. 863
446	1, 265. 659	523	1, 484. 167	600	1, 702. 680	677	1, 921. 191	754	2, 139. 701
447	1, 268. 497	524	1, 487. 007	601	1, 705. 518	678	1, 924. 028	755	2, 142. 539
448	1, 271. 334	525	1, 489. 845	602	1, 708. 356	679	1, 926. 866	756	2, 145. 377
449	1, 274. 172	526	1, 492. 683	603	1, 711. 193	680	1, 929. 704	757	2, 148. 215
450	1, 277. 010	527	1, 495. 521	604	1, 714. 031	681	1, 932. 542	758	2, 151. 052
451	1, 279. 848	528	1, 498. 358	605	1, 716. 869	682	1, 935. 380	759	2, 153. 890
452	1, 282. 686	529	1, 501. 196	606	1, 719. 707	683	1, 938. 217	760	2, 156. 728
453	1, 285. 523	530	1, 504. 034	607	1, 722. 545	684	1, 941. 055	761	2, 159. 566
454	1, 288. 361	531	1, 506. 872	608	1, 725. 382	685	1, 943. 893	762	2, 162. 404
455	1, 291. 199	532	1, 509. 710	609	1, 728. 220	686	1, 946 731	763	2, 165. 241
456	1, 294. 037	533	1, 512. 547	610	1, 731. 058	687	1, 949. 569	764	2, 168. 079
447	1, 296. 875	534	1, 515. 385	611	1, 733. 896	688	1, 952. 406	765	2, 170. 917
458	1, 299. 712	535	1, 518. 223	612	1, 736. 734	689	1, 955. 244	766	2, 173. 755
459	1, 302. 550	536	1, 521. 061	613	1, 739. 571	690	1, 958. 082	767	2, 176. 593
460	1, 305. 388	537	1, 523. 899	614	1, 742. 409	691	1, 960. 920	768	2, 179. 430
461	1, 308. 226	538	1, 526. 736	615	1, 745. 247	692	1, 963. 758	769	2, 182. 268
462	1, 311. 064	539	1, 529. 574	616	1, 748. 085	693	1, 966. 595	770	2, 185. 106

Hectoliters converted into bushels—Continued.

Hectoliters.	Bushels.	Hectoliters.	Bushels.	Hectoliters.	Bushels.	Hectoliters.	Bushels.	Hectoliters.	Bushels.
771	2,187.944	817	2,318.483	863	2,449.021	909	2,579.560	955	2,710.099
772	2,190.782	818	2,321.320	864	2,451.859	910	2,582.398	956	2,712.937
773	2,193.619	819	2,324.158	865	2,454.697	911	2,585.236	957	2,715.775
774	2,196.457	820	2,326.996	866	2,457.535	912	2,588.074	958	2,718.612
775	2,199.295	821	2,329.834	867	2,460.373	913	2,590.911	959	2,721.450
776	2,202.133	822	2,332.672	868	2,463.210	914	2,593.749	960	2,724.288
777	2,204.971	823	2,335.509	869	2,466.048	915	2,596.587	961	2,727.126
778	2,207.808	824	2,338.347	870	2,468.886	916	2,599.425	962	2,729.964
779	2,210.646	825	2,341.185	871	2,471.724	917	2,602.263	963	2,732.801
780	2,213.484	826	2,344.023	872	2,474.562	918	2,605.100	964	2,735.639
781	2,216.322	827	2,346.861	873	2,477.399	919	2,607.938	965	2,738.477
782	2,219.160	828	2,349.698	874	2,480.237	920	2,610.776	966	2,741.315
783	2,221.997	829	2,352.536	875	2,483.075	921	2,613.614	967	2,744.153
784	2,224.835	830	2,355.374	876	2,485.913	922	2,616.452	968	2,746.990
785	2,227.673	831	2,358.212	877	2,488.751	923	2,619.289	969	2,749.828
786	2,230.511	832	2,361.050	878	2,491.588	924	2,622.127	970	2,752.666
787	2,233.349	833	2,363.887	879	2,494.426	925	2,624.965	971	2,755.504
788	2,236.186	834	2,366.725	880	2,497.264	926	2,627.803	972	2,758.342
789	2,239.024	835	2,369.563	881	2,500.102	927	2,630.641	973	2,761.179
790	2,241.862	836	2,372.401	882	2,502.940	928	2,633.478	974	2,764.017
791	2,244.700	837	2,375.239	883	2,505.777	929	2,636.316	975	2,766.855
792	2,247.538	838	2,378.076	884	2,508.615	930	2,639.154	976	2,769.693
793	2,250.375	839	2,380.914	885	2,511.453	931	2,641.992	977	2,772.531
794	2,253.213	840	2,383.752	886	2,514.291	932	2,644.830	978	2,775.368
795	2,256.051	841	2,386.590	887	2,517.129	933	2,647.667	979	2,778.206
796	2,258.889	842	2,389.428	888	2,519.966	934	2,650.505	980	2,781.044
797	2,261.727	843	2,392.265	889	2,522.804	935	2,653.343	981	2,783.882
798	2,264.564	844	2,395.103	890	2,525.642	936	2,656.181	982	2,786.720
799	2,267.402	845	2,397.941	891	2,528.480	937	2,659.019	983	2,789.557
800	2,270.240	846	2,400.779	892	2,531.318	938	2,661.856	984	2,792.395
801	2,273.078	847	2,403.617	893	2,534.155	939	2,664.694	985	2,795.233
802	2,275.916	848	2,406.454	894	2,536.993	940	2,667.532	986	2,798.071
803	2,278.753	849	2,409.292	895	2,539.831	941	2,670.370	987	2,800.909
804	2,281.591	850	2,412.130	896	2,542.669	942	2,673.208	988	2,803.746
805	2,284.429	851	2,414.968	897	2,545.507	943	2,676.046	989	2,806.584
806	2,287.267	852	2,417.806	898	2,548.345	944	2,678.883	990	2,809.422
807	2,290.105	853	2,420.643	899	2,551.183	945	2,681.721	991	2,812.260
808	2,292.942	854	2,423.481	900	2,554.020	946	2,684.559	992	2,815.098
809	2,295.780	855	2,426.319	901	2,556.858	947	2,687.397	993	2,817.935
810	2,298.618	856	2,429.157	902	2,559.696	948	2,690.234	994	2,820.773
811	2,301.456	857	2,431.995	903	2,562.533	949	2,693.072	995	2,823.611
812	2,304.294	858	2,434.832	904	2,565.371	950	2,695.910	996	2,826.449
813	2,307.131	859	2,437.670	905	2,568.209	951	2,698.748	997	2,829.287
814	2,309.969	860	2,440.508	906	2,571.047	952	2,701.586	998	2,832.124
815	2,312.807	861	2,443.346	907	2,573.885	953	2,704.423	999	2,834.962
816	2,315.645	862	2,446.184	908	2,576.722	954	2,707.261	1,000	2,837.800
1	2.837800	21	59.593800	41	116.349800	61	173.105800	81	229.861800
2	5.675600	22	62.431600	42	119.187600	62	175.943600	82	232.699600
3	8.513400	23	65.269400	43	122.025400	63	178.781400	83	235.537400
4	11.351200	24	68.107200	44	124.863200	64	181.619200	84	238.375200
5	14.189000	25	70.945000	45	127.701000	65	184.457000	85	241.213000
6	17.026800	26	73.782800	46	130.538800	66	187.294800	86	244.050800
7	19.864600	27	76.620600	47	133.376600	67	190.132600	87	246.888600
8	22.702400	28	79.458400	48	136.214400	68	192.970400	88	249.726400
9	25.540200	29	82.296200	49	139.052200	69	195.808200	89	252.564200
10	28.378000	30	85.134000	50	141.890000	70	198.646000	90	255.402000
11	31.215800	31	87.971800	51	144.727800	71	201.483800	91	258.239800
12	34.053600	32	90.809600	52	147.565600	72	204.321600	92	261.077600
13	36.891400	33	93.647400	53	150.403400	73	207.159400	93	263.915400
14	39.729200	34	96.485200	54	153.241200	74	209.997200	94	266.753200
15	42.567000	35	99.323000	55	156.079000	75	212.835000	95	269.591000
16	45.404800	36	102.160800	56	158.916800	76	215.672800	96	272.428800
17	48.242600	37	104.998600	57	161.754600	77	218.510600	97	275.266600
18	51.080400	38	107.836400	58	164.592400	78	221.348400	98	278.104400
19	53.918200	39	110.674200	59	167.430200	79	224.186200	99	280.942200
20	56.756000	40	113.512000	60	170.268000	80	227.024000	100	283.780000

Hectoliters converted into gallons.

Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.
1	26.417	79	2,086.943	157	4,147.469	235	6,207.995	313	8,268.521
2	52.834	80	2,113.360	158	4,173.886	236	6,234.412	314	8,294.938
3	79,251	81	2,139.777	159	4,200.303	237	6,260.829	315	8,321.355
4	105.668	82	2,166.194	160	4,226.720	238	6,287.246	316	8,347.772
5	132.085	83	2,192.611	161	4,253.137	239	6,313.663	317	8,374.189
6	158.502	84	2,219.028	162	4,279.554	240	6,340.080	318	8,400.606
7	184.919	85	2,245.445	163	4,305.971	241	6,366.497	319	8,427.023
8	211.336	86	2,271.862	164	4,332.388	242	6,392.914	320	8,453.440
9	237.753	87	2,298.279	165	4,358.805	243	6,419.331	321	8,479.857
10	264.170	88	2,324.696	166	4,385.222	244	6,445.748	322	8,506.274
11	290.587	89	2,351.113	167	4,411.639	245	6,472.165	323	8,532.691
12	317.004	90	2,377.530	168	4,438.056	246	6,498.582	324	8,559.108
13	343.421	91	2,403.947	169	4,464.473	247	6,524.999	325	8,585.525
14	369.838	92	2,430.364	170	4,490.890	248	6,551.416	326	8,611.942
15	396.255	93	2,456.781	171	4,517.307	249	6,577.833	327	8,638.359
16	422.672	94	2,483.198	172	4,543.724	250	6,604.250	328	8,664.776
17	449.089	95	2,509.615	173	4,570.141	251	6,630.667	329	8,691.193
18	475.506	96	2,536.032	174	4,596.558	252	6,657.084	330	8,717.610
19	501.923	97	2,562.449	175	4,622.975	253	6,683.501	331	8,744.027
20	528.340	98	2,588.866	176	4,649.392	254	6,709.918	332	8,770.444
21	554.757	99	2,615.283	177	4,675.809	255	6,736.335	333	8,796.861
22	581.174	100	2,641.700	178	4,702.226	256	6,762.752	334	8,823.278
23	607.591	101	2,668.117	179	4,728.643	257	6,789.169	335	8,849.695
24	634.008	102	2,694.534	180	4,755.060	258	6,815.586	336	8,876.112
25	660.425	103	2,720.951	181	4,781.477	259	6,842.003	337	8,902.529
26	686.842	104	2,747.368	182	4,807.894	260	6,868.420	338	8,928.946
27	713.259	105	2,773.785	183	4,834.311	261	6,894.837	339	8,955.363
28	739.676	106	2,800.202	184	4,860.728	262	6,921.254	340	8,981.780
29	766.093	107	2,826.619	185	4,887.145	263	6,947.671	341	9,008.197
30	792.510	108	2,853.036	186	4,913.562	264	6,974.088	342	9,034.614
31	818.927	109	2,879.453	187	4,939.979	265	7,000.505	343	9,061.031
32	845.344	110	2,905.870	188	4,966.396	266	7,026.922	344	9,087.448
33	871.761	111	2,932.287	189	4,992.813	267	7,053.339	345	9,113.865
34	898.178	112	2,958.704	190	5,019.230	268	7,079.756	346	9,140.282
35	924.595	113	2,985.121	191	5,045.647	269	7,106.173	347	9,166.699
36	951.012	114	3,011.538	192	5,072.064	270	7,132.590	348	9,193.116
37	977.429	115	3,037.955	193	5,098.481	271	7,159.007	349	9,219.533
38	1,003.846	116	3,064.372	194	5,124.898	272	7,185.424	350	9,245.950
39	1,030.263	117	3,090.789	195	5,151.315	273	7,211.841	351	9,272.367
40	1,056.680	118	3,117.206	196	5.177.732	274	7,238.258	352	9,298.784
41	1,083.097	119	3,143.623	197	5,204.149	275	7,264.675	353	9,325.201
42	1,109,514	120	3,170.040	198	5,230.566	276	7,291.092	354	9,351.618
43	1,135.931	121	3,196.457	199	5,256.983	277	7,317.509	355	9,378.035
44	1,162.348	122	3,222.874	200	5,283.400	278	7,343.926	356	9,404.452
45	1,188.765	123	3,249.291	201	5,309.817	279	7,370.343	357	9,430.869
46	1,215.182	124	3,275.708	202	5,336.234	280	7,396.760	358	9,457.286
47	1,241.599	125	3,302.125	203	5,362.651	281	7,423.177	359	9,483.703
48	1,268.016	126	3,328.542	204	5,389.068	282	7,449.594	360	9,510.120
49	1,294.433	127	3,354.959	205	5,415.485	283	7,476.011	361	9,536.537
50	1,320.850	128	3,381.376	206	5,441.902	284	7,502.428	362	9,562.954
51	1,347.267	129	3,407.793	207	5,468.319	285	7,528.845	363	9,589.371
52	1,373.684	130	3,434.210	208	5,494.736	286	7,555.262	364	9,615.788
53	1,400.101	131	3,460.627	209	5,521.153	287	7,581.679	365	9,642.205
54	1,426.518	132	3,487.044	210	5.547.570	288	7,608.096	366	9,668.622
55	1,452,935	133	3,513.461	211	5,573.987	289	7,634.513	367	9,695.039
56	1,479.352	134	3,539.878	212	5,600.404	290	7,660.930	368	9,721.456
57	1,505.769	135	3,566.295	213	5,626.821	291	7,687.347	369	9,747.873
58	1,532.186	136	3,592.712	214	5,653.238	292	7,713.764	370	9,774.290
59	1,558.603	137	3,619.129	215	5,679.655	293	7,740.181	371	9,800.707
60	1,585.020	138	3,645.546	216	5,706.072	294	7,766.598	372	9,827.124
61	1,611.437	139	3,671.963	217	5,732.489	295	7,793.015	373	9,853.541
62	1,637.854	140	3,698.380	218	5,758.906	296	7,819.432	374	9,879.958
63	1,664.271	141	3,724.797	219	5.785.323	297	7,845.849	375	9,906.375
64	1,690.688	142	3,751.214	220	5,811.740	298	7,872.266	376	9,932.792
65	1,717.105	143	3,777.631	221	5,838.157	299	7,898.683	377	9,959.209
66	1,743.522	144	3,804.048	222	5,864.574	300	7,925.100	378	9,985.626
67	1,769.939	145	3,830.465	223	5,890.991	301	7,951.517	379	10,012.043
68	1,796.356	146	3,856.882	224	5,917.408	302	7,977.934	380	10,038.460
69	1,822.773	147	3,883.299	225	5,943.825	303	8,004.351	381	10,064.877
70	1,849.190	148	3,909.716	226	5,970.242	304	8,030.768	382	10,091.294
71	1,875.607	149	3,936.133	227	5,996.659	305	8,057.185	383	10,117.711
72	1,902.024	150	3,962.550	228	6,023.076	306	8,083.602	384	10,144.128
73	1,928.441	151	3,988.967	229	6,049.493	307	8,110.019	385	10,170.545
74	1,954.858	152	4.015.384	230	6,075.910	308	8,136.436	386	10,196.962
75	1,981.275	153	4,041.801	231	6,102.327	309	8,162.853	387	10,223.379
76	2,007.692	154	4,068.218	232	6,128.744	310	8.189.270	388	10,249.796
77	2,034.109	155	4,094.635	233	6,155.161	311	8,215.687	389	10,276.213
78	2,060.526	156	4,121.052	234	6,181.578	312	8,242.104	390	10,302.630

Hectoliters converted into gallons—Continued.

Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.
391	10, 329. 047	469	12, 389. 573	547	14, 450. 099	625	16, 510. 625	703	18, 571. 151
392	10, 355. 464	470	12, 415. 990	548	14, 476. 516	626	16, 537. 042	704	18, 597. 568
393	10, 381. 881	471	12, 442. 407	549	14, 502. 933	627	16, 563. 459	705	18, 623. 985
394	10, 408. 298	472	12, 468. 824	550	14, 529. 350	628	16, 589. 876	706	18, 650. 402
395	10, 434. 715	423	12, 495. 241	551	14, 555. 767	629	16, 616. 293	707	18, 676. 819
396	10, 461. 132	474	12, 521. 658	552	14, 582. 184	630	16, 642. 710	708	18, 703. 236
397	10, 487. 549	475	12, 548. 075	553	14, 608. 601	631	16, 669. 127	709	18, 729. 653
398	10, 513. 966	476	12, 574. 492	554	14, 635. 018	632	16, 695. 544	710	18, 756. 070
399	10, 540. 383	477	12, 600. 909	555	14, 661. 435	633	16, 721. 961	711	18, 782. 487
400	10, 566. 800	478	12, 627. 326	556	14, 687. 852	634	16, 748. 378	712	18, 808. 904
401	10, 593. 217	479	12, 653. 743	557	14, 714. 269	635	16, 774. 795	713	18, 835. 321
402	10, 619. 634	480	12, 680. 160	558	14, 740. 686	636	16, 801. 212	714	18, 861. 738
403	10, 646. 051	481	12, 706. 577	559	14, 767. 103	637	16, 827. 629	715	18, 888. 155
404	10, 672. 468	482	12, 732. 994	560	14, 793. 520	638	16, 854. 046	716	18, 914. 572
405	10, 698. 885	483	12, 759. 411	561	14, 819. 937	639	16, 880. 463	717	18, 940. 989
406	10, 725. 302	484	12, 785. 828	562	14, 846. 354	640	16, 906. 880	718	18, 967. 406
407	10, 751. 719	485	12, 812. 245	563	14, 872. 771	641	16, 933. 297	719	18, 993. 823
408	10, 778. 136	486	12, 838. 662	564	14, 899. 188	642	16, 959. 714	720	19, 020. 240
409	10, 804. 553	487	12, 865. 079	565	14, 925. 605	643	16, 986. 131	721	19, 046. 657
410	10, 830. 970	488	12, 891. 496	566	14, 952. 022	644	17, 012. 548	722	19, 073. 074
411	10, 857. 387	489	12, 917. 913	567	14, 978. 439	645	17, 038. 965	723	19, 099. 491
412	10, 883. 804	490	12, 944. 330	568	15, 004. 856	646	17, 065. 382	724	19, 125. 908
413	10, 910. 221	491	12, 970. 747	569	15, 031. 273	647	17, 091. 799	725	19, 152. 325
414	10, 936. 638	492	12, 997. 164	570	15, 057. 690	648	17, 118. 216	726	19, 178. 742
415	10, 963. 055	493	13, 023. 581	571	15, 084. 107	649	17, 144. 633	727	19, 205. 159
416	10, 989. 472	494	13, 049. 998	572	15, 110. 524	650	17, 171. 050	728	19, 231. 576
417	11, 015. 889	495	13, 076. 415	573	15, 136. 941	651	17, 197. 167	729	19, 257. 993
418	11, 042. 306	496	13, 102. 832	574	15, 163. 358	652	17, 223. 884	730	19, 284. 410
419	11, 068. 723	497	13, 129. 249	575	15, 189. 775	653	17, 250. 301	731	19, 310. 827
420	11, 095. 140	498	13, 155. 666	576	15, 216. 192	654	17, 276. 718	732	19, 337. 244
421	11, 121. 557	499	13, 182. 083	577	15, 242. 609	655	17, 303. 135	733	19, 363. 661
422	11, 147. 974	500	13, 208. 500	578	15, 269. 026	656	17, 329. 552	734	19, 390. 078
423	11, 174. 391	501	13, 234. 917	579	15, 295. 443	657	17, 355. 969	735	19, 416. 495
424	11, 200. 808	502	13, 261. 334	580	15, 321. 860	658	17, 382. 386	736	19, 442. 912
425	11, 227. 225	503	13, 287. 751	581	15, 348. 277	659	17, 408. 803	737	19, 469. 329
426	11, 253. 642	504	13, 314. 168	582	15, 374. 694	660	17, 435. 220	738	19, 495. 746
427	11, 280. 059	505	13, 340. 585	583	15, 401. 111	661	17, 461. 637	739	19, 522. 163
428	11, 306. 476	506	13, 367. 002	584	15, 427. 528	662	17, 488. 054	740	19, 548. 580
429	11, 332. 893	507	13, 393. 419	585	15, 453. 945	663	17, 514. 471	741	19, 574. 997
430	11, 359. 310	508	13, 419. 836	586	15, 480. 362	664	17, 540. 888	742	19, 601. 414
431	11, 385. 727	509	13, 446. 253	587	15, 506. 779	665	17, 567. 305	743	19, 627. 831
432	11, 412. 144	510	13, 472. 670	588	15, 533. 196	666	17, 593. 722	744	19, 654. 248
433	11, 438. 561	511	13, 499. 087	589	15, 559. 613	667	17, 620. 139	745	19, 680. 665
434	11, 464. 978	512	13, 525. 504	590	15, 586. 030	668	17, 646. 556	746	19, 707. 082
435	11, 491. 395	513	13, 551. 921	591	15, 612. 447	669	17, 672. 973	747	19, 733. 499
436	11, 517. 812	514	13, 578. 338	592	15, 638. 864	670	17, 690. 390	748	19, 759. 916
437	11, 544. 229	515	13, 604. 755	593	15, 665. 281	671	17, 725. 807	749	19, 786. 333
438	11, 570. 646	516	13, 631. 172	594	15, 691. 698	672	17, 752. 224	750	19, 812. 750
439	11, 597. 063	517	13, 657. 589	595	15, 718. 115	673	17, 778. 641	751	19, 839. 167
440	11, 623. 480	518	13, 684. 006	596	15, 744. 532	674	17, 805. 058	752	19, 865. 584
441	11, 649. 897	519	13, 710. 423	597	15, 770. 949	675	17, 831. 475	753	19, 892. 001
442	11, 676. 314	520	13, 736. 840	598	15, 797. 366	676	17, 857. 892	754	19, 918. 418
443	11, 702. 731	521	13, 763. 257	599	15, 823. 783	677	17, 884. 309	755	19, 944. 835
444	11, 729. 148	522	13, 789. 674	600	15, 850. 200	678	17, 910. 726	756	19, 971. 252
445	11, 755. 565	523	13, 816. 091	601	15, 876. 617	679	17, 937. 143	757	19, 997. 669
446	11, 781. 982	524	13, 842. 508	602	15, 903. 034	680	17, 963. 560	758	20, 024. 086
447	11, 808. 399	525	13, 868. 925	603	15, 929. 451	681	17, 989. 977	759	20, 050. 503
448	11, 834. 816	526	13, 895. 342	604	15, 955. 868	682	18, 016. 394	760	20, 076. 920
449	11, 861. 233	527	13, 921. 759	605	15, 982. 285	683	18, 042. 811	761	20, 103. 337
450	11, 887. 650	528	13, 948. 176	606	16, 008. 702	684	18, 069. 228	762	20, 129. 754
451	11, 914. 067	529	13, 974. 593	607	16, 035. 119	685	18, 095. 645	763	20, 156. 171
452	11, 940. 484	530	14, 001. 010	608	16, 061. 536	686	18, 122. 063	764	20, 182. 588
453	11, 966. 901	531	14, 027. 427	609	16, 087. 953	687	18, 148. 479	765	20, 209. 005
454	11, 993. 318	532	14, 053. 844	610	16, 114. 370	688	18, 174. 896	766	20, 235. 422
455	12, 019. 735	533	14, 080. 261	611	16, 140. 787	689	18, 201. 313	767	20, 261. 839
456	12, 046. 152	534	14, 106. 678	612	16, 167. 204	690	18, 227. 730	768	20, 288. 256
457	12, 072. 569	535	14, 133. 095	613	16, 193. 621	691	18, 254. 147	769	20, 314. 673
458	12, 098. 986	536	14, 159. 512	614	16, 220. 038	692	18, 280. 564	770	20, 341. 090
459	12, 125. 403	537	14, 185. 929	615	16, 246. 455	693	18, 306. 981	771	20, 367. 507
460	12, 151. 820	538	14, 212. 346	616	16, 272. 872	694	18, 333. 398	772	20, 393. 924
461	12, 178. 237	539	14, 238. 763	617	16, 299. 289	695	18, 359. 815	773	20, 420. 341
462	12, 204. 654	540	14, 265. 180	618	16, 325. 706	696	18, 386. 232	774	20, 446. 758
463	12, 231. 071	541	14, 291. 597	619	16, 352. 123	697	18, 412. 649	775	20, 473. 175
464	12, 257. 488	542	14, 318. 014	620	16, 378. 540	698	18, 439. 066	776	20, 499. 592
465	12, 383. 905	543	14, 344. 431	621	16, 404. 957	699	18, 465. 483	777	20, 526. 009
466	12, 310. 322	544	14, 370. 848	622	16, 431. 374	700	18, 491. 900	778	20, 552. 426
467	12, 336. 739	545	14, 397. 265	623	16, 457. 791	701	18, 518. 317	779	20, 578. 843
468	12, 363. 156	546	14, 423. 682	624	16, 484. 208	702	18, 544. 734	780	20, 605. 260

Hectoliters converted into gallons—Continued.

Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.	Hectoliters.	Gallons.
781	20,631.677	825	21,794.025	869	22,956.373	913	24,118.721	957	25,281.069
782	20,658.094	826	21,820.442	870	22,982.790	914	24,145.138	958	25,307.486
783	20,684.511	827	21,846.859	871	23,009.207	915	24,171.555	959	25,333.903
784	20,710.928	828	21,873.276	872	23,035.624	916	24,197.972	960	25,360.320
785	20,737.345	829	21,899.693	873	23,062.041	917	24,224.389	961	25,386.737
786	20,763.762	830	21,926.110	874	23,088.458	918	24,250.806	962	25,413.154
787	20,790.179	831	21,952.527	875	23,114.875	919	24,277.223	963	25,439.571
788	20,816.596	832	21,978.944	876	23,141.292	920	24,303.640	964	25,465.988
789	20,843.013	833	22,005.361	877	23,167.709	921	24,330.057	965	25,492.405
790	20,869.430	834	22,031.778	878	23,194.126	922	24,356.474	966	25,518.822
791	20,895.847	835	22,058.195	879	23,220.543	923	24,382.891	967	25,545.239
792	20,922.264	836	22,084.612	880	23,246.960	924	24,409.308	968	25,571.656
793	20,948.681	837	22,111.029	881	23,273.377	925	24,435.725	969	25,598.073
794	20,975.098	838	22,137.446	882	23,299.794	926	24,462.142	970	25,624.490
795	21,001.515	839	22,163.863	883	23,326.211	927	24,488.559	971	25,650.907
796	21,027.932	840	22,190.280	884	23,352.628	928	24,514.976	972	25,677.324
797	21,054.349	841	22,216.697	885	23,379.045	929	24,541.393	973	25,703.741
798	21,080.766	842	22,243.114	886	23,405.462	930	24,567.810	974	25,730.158
799	21,107.183	843	22,269.531	887	23,431.879	931	24,594.227	975	25,756.575
800	21,133.600	844	22,295.948	888	23,458.296	932	24,620.644	976	25,782.992
801	21,160.017	845	22,322.365	889	23,484.713	933	24,647.061	977	25,809.409
802	21,186.434	846	22,348.782	890	23,511.130	934	24,673.478	978	25,835.826
803	21,212.851	847	22,375.199	891	23,537.547	935	24,699.895	979	25,862.243
804	21,239.268	848	22,401.616	892	23,563.964	936	24,726.312	980	25,888.660
805	21,265.685	849	22,428.033	893	23,590.381	937	24,752.729	981	25,915.077
806	21,292.102	850	22,454.450	894	23,616.798	938	24,779.146	982	25,941.494
807	21,318.519	851	22,480.867	895	23,643.215	939	24,805.563	983	25,967.911
808	21,344.936	852	22,507.284	896	23,669.632	940	24,831.980	984	25,994.328
809	21,371.353	853	22,533.701	897	23,696.049	941	24,858.397	985	26,020.745
810	21,397.770	854	22,560.118	898	23,722.466	942	24,884.814	986	26,047.162
811	21,424.187	855	22,586.535	899	23,748.883	943	24,911.231	987	26,073.579
812	21,450.604	856	22,612.952	900	23,775.300	944	24,937.648	988	26,099.996
813	21,477.021	857	22,639.369	901	23,801.717	945	24,964.065	989	26,126.413
814	21,503.438	858	22,665.786	902	23,828.134	946	24,990.482	990	26,152.830
815	21,529.855	859	22,692.203	903	23,854.551	947	25,016.899	991	26,179.247
816	21,556.272	860	22,718.620	904	23,880.968	948	25,043.316	992	26,205.664
817	21,582.689	861	22,745.037	905	23,907.385	949	25,069.733	993	26,232.081
818	21,609.106	862	22,771.454	906	23,933.802	950	25,096.150	994	26,258.498
819	21,635.523	863	22,797.871	907	23,960.219	951	25,122.567	995	26,284.915
820	21,661.940	864	22,824.288	908	23,986.636	952	25,148.984	996	26,311.332
821	21,688.357	865	22,850.705	909	24,013.053	953	25,175.401	997	26,337.749
822	21,714.774	866	22,877.122	910	24,039.470	954	25,201.818	998	26,364.166
823	21,741.191	867	22,903.539	911	24,065.887	955	25,228.235	999	26,390.583
824	21,767.608	868	22,929.956	912	24,092.304	956	25,254.652	1,000	26,417.000

Hectares converted into acres.

Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.
1	2.471	80	197.691	159	392.910	238	588.130	317	[illegible]
2	4.942	81	200.162	160	395.381	239	590.601	318	[illegible]
3	7.413	82	202.633	161	397.853	240	593.074	319	[illegible]
4	9.885	83	205.105	162	400.324	241	595.545	320	[illegible]
5	12.356	84	207.576	163	402.795	242	598.016	321	[illegible]
6	14.827	85	210.047	164	405.266	243	600.487	322	[illegible]
7	17.298	86	212.518	165	407.737	244	602.958	323	[illegible]
8	19.769	87	214.989	166	410.208	245	605.429	324	[illegible]
9	22.240	88	217.460	167	412.679	246	607.900	325	[illegible]
10	24.711	89	219.931	168	415.150	247	610.371	326	[illegible]
11	27.183	90	222.403	169	417.621	248	612.842	327	[illegible]
12	29.654	91	224.874	170	420.094	249	615.313	328	[illegible]
13	32.125	92	227.345	171	422.565	250	617.785	329	[illegible]
14	34.596	93	229.816	172	425.036	251	620.256	330	[illegible]
15	37.067	94	232.287	173	427.507	252	622.727	331	[illegible]
16	39.538	95	234.758	174	429.978	253	625.198	332	[illegible]
17	42.009	96	237.229	175	432.449	254	627.669	333	[illegible]
18	44.481	97	239.701	176	434.920	255	630.140	334	[illegible]
19	46.952	98	242.172	177	437.391	256	632.611	335	[illegible]
20	49.423	99	244.643	178	439.862	257	635.082	336	[illegible]
21	51.894	100	247.114	179	442.333	258	637.553	337	[illegible]
22	54.365	101	249.585	180	444.805	259	640.024	338	[illegible]
23	56.836	102	252.056	181	447.276	260	642.496	339	[illegible]
24	69.307	103	254.527	182	449.747	261	644.967	340	[illegible]
25	61.778	104	256.998	183	452.218	262	647.438	341	[illegible]
26	64.250	105	259.469	184	454.689	263	649.909	342	[illegible]
27	66.721	106	261.940	185	457.160	264	652.380	343	[illegible]
28	69.192	107	264.411	186	459.631	265	654.851	344	[illegible]
29	71.663	108	266.882	187	462.102	266	657.322	345	[illegible]
30	74.134	109	269.353	188	464.573	267	659.793	346	[illegible]
31	76.605	110	271.825	189	467.044	268	662.264	347	[illegible]
32	79.076	111	274.296	190	469.517	269	664.735	348	[illegible]
33	81.548	112	276.767	191	471.988	270	667.208	349	[illegible]
34	84.019	113	279.238	192	474.459	271	669.679	350	[illegible]
35	86.490	114	281.709	193	476.930	272	672.150	351	[illegible]
36	88.961	115	284.180	194	479.401	273	674.621	352	[illegible]
37	91.432	116	286.651	195	481.872	274	677.092	353	[illegible]
38	93.903	117	289.122	196	484.343	275	679.563	354	[illegible]
39	96.374	118	291.593	197	486.814	276	682.034	355	[illegible]
40	98.846	119	294.064	198	489.285	277	684.505	356	[illegible]
41	101.317	120	296.537	199	491.756	278	686.976	357	[illegible]
42	103.788	121	299.008	200	494.228	279	689.447	358	[illegible]
43	106.259	122	301.479	201	496.699	280	691.919	359	[illegible]
44	108.730	123	303.953	202	499.170	281	694.390	360	[illegible]
45	111.201	124	306.421	203	501.641	282	696.861	361	[illegible]
46	113.672	125	308.892	204	504.112	283	699.332	362	[illegible]
47	116.144	126	311.363	205	506.583	284	701.803	363	[illegible]
48	118.615	127	313.834	206	509 054	285	704.274	364	[illegible]
49	121.086	128	316.305	207	511.525	286	706.745	365	[illegible]
50	123.557	129	318.776	208	513.996	287	709.216	366	[illegible]
51	126.028	130	321.247	209	516.467	288	711.687	367	[illegible]
52	128.499	131	323.722	210	518.938	289	714.158	368	[illegible]
53	130.970	132	326.190	211	521.410	290	716.631	369	[illegible]
54	133.442	133	328.661	212	523.881	291	719.102	370	[illegible]
55	135.913	134	331.132	213	526.352	292	721.573	371	[illegible]
56	138.384	135	333.603	214	528.824	293	724.044	372	[illegible]
57	140.855	136	336.074	215	531.294	294	726.515	373	[illegible]
58	143.326	137	338.545	216	533.766	295	728.986	374	[illegible]
59	145.707	138	341.016	217	536.236	296	731.457	375	[illegible]
60	148.268	139	343.487	218	538.708	297	733.928	376	[illegible]
61	150.740	140	345.960	219	541.178	298	736.399	377	[illegible]
62	153.211	141	348.431	220	543.651	299	738.870	378	[illegible]
63	155.682	142	350.902	221	546.122	300	741.342	379	[illegible]
64	158.153	143	353.373	222	548.593	301	743.813	380	[illegible]
65	160.624	144	355.844	223	551.064	302	746.284	381	[illegible]
66	163.095	145	358.315	224	553.535	303	748.755	382	[illegible]
67	165.566	146	360.786	225	556.006	304	751.226	383	[illegible]
68	168.037	147	363.257	226	558.477	305	753.697	384	[illegible]
69	170.509	148	365.728	227	560.948	306	756.163	385	[illegible]
70	172.980	149	368.199	228	563.419	307	758.639	386	[illegible]
71	175.451	150	370.671	229	565.890	308	761.110	387	[illegible]
72	177.922	151	373.142	230	568.362	309	763.581	388	[illegible]
73	180.393	152	375.613	231	570.833	310	766.053	389	[illegible]
74	182.864	153	378.084	232	573.304	311	768.524	390	[illegible]
75	185.336	154	380.555	233	575.775	312	770.995	391	[illegible]
76	187.807	155	383.026	234	578.246	313	773.466	392	[illegible]
77	190.278	156	385.497	235	580.717	314	775.937	393	[illegible]
78	192.749	157	387.968	236	583.188	315	778.408	394	[illegible]
79	195.220	158	390.439	237	585.659	316	780.879	395	[illegible]

Hectares converted into acres—Continued.

Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.
396	978.570	475	1,173.791	554	1,369.011	633	1,564.231	712	1,759.451
397	981.041	476	1,176.262	555	1,371.482	634	1,566.702	713	1,761.922
398	983.512	477	1,178.733	556	1,373.653	635	1,569.173	714	1,764.393
399	985.983	478	1,181.204	557	1,376.424	636	1,571.644	715	1,766.864
400	988.456	479	1,183.675	558	1,378.895	637	1,574.715	716	1,769.335
401	990.927	480	1,186.147	559	1,381.366	638	1,576.586	717	1,771.806
402	993.398	481	1,188.618	560	1.383.838	639	1,579.057	718	1,774.277
403	995.869	482	1,191.089	561	1,386.309	640	1,581.530	719	1,776.748
404	998.340	483	1,193.560	562	1,388.780	641	1,584.001	720	1,779.221
405	1,000.811	484	1,196.031	563	1,391.251	642	1,586.472	721	1,781.692
406	1,003.282	485	1,198.502	564	1,393.722	643	1,588.943	722	1,784.163
407	1,005.753	486	1,200.973	565	1,396.193	644	1,591.414	723	1,786.634
408	1,008.224	487	1,203.444	566	1,398.664	645	1,593.885	724	1,789.105
409	1,010.695	488	1,205.915	567	1,401.135	646	1,596.356	725	1,791.476
410	1,013.167	489	1,208.386	568	1,403.606	647	1,598.827	726	1,793.947
411	1,015.638	490	1,210.859	569	1,406.077	648	1,601.298	727	1,796.418
412	1,018.109	491	1,213.330	570	1,408.550	649	1,603.769	728	1,798.889
413	1,020.580	492	1,215.801	571	1,411.021	650	1,606.241	729	1,801.360
414	1,023.051	493	1,218.272	572	1,413.492	651	1,608.712	730	1,803.932
415	1,025.522	494	1,220.743	573	1,415.963	652	1,611.183	731	1,806.403
416	1,027.993	495	1,223.214	574	1,418.434	653	1,613.654	732	1,808.874
417	1,030.464	496	1,225.685	575	1,420.905	654	1,616.125	733	1,811.345
418	1,032.935	497	1,228.156	575	1,423.376	655	1,618.596	734	1,813.816
419	1,035.406	498	1,230.627	577	1,425.847	656	1,621.067	735	1,816.287
420	1,037.879	499	1,233.098	578	1,428.318	657	1,623.538	736	1,818.758
421	1,040.350	500	1,235.570	579	1,430.789	658	1,626.009	737	1,821.229
422	1,042.821	501	1,238.041	580	1,433.261	659	1,628.480	738	1,823.700
423	1,045.292	502	1,240.512	581	1,435.732	660	1,630.952	739	1,826.171
424	1,047.763	503	1,242.983	582	1,438.203	661	1,633.423	740	1,828.644
425	1,050.234	504	1,245.454	583	1,440.674	662	1,635.894	741	1,831.115
426	1,052.705	505	1,247.925	584	1,443.145	663	1,638.365	742	1,833.586
427	1,055.176	506	1,250.396	585	1,445.616	664	1,640.836	743	1,836.057
428	1,057.647	507	1,252.867	586	1,448 087	665	1,643.307	744	1,838.528
429	1,060.118	508	1,255.338	587	1,450.558	666	1,645.778	745	1,840.999
430	1,062,590	509	1,257.809	588	1,453.029	667	1,648.249	746	1,843.470
431	1,065.061	510	1,260.281	589	1,455.500	668	1,650.720	747	1,845.941
432	1,067.532	511	1,262.752	590	1,457.973	669	1,653.191	748	1,848.412
433	1,070.003	512	1,265.223	591	1,460.444	670	1,655.664	749	1,850.883
434	1,072.474	513	1,267.694	592	1,462.915	671	1,658.135	750	1,853.355
435	1,074.945	514	1,270.165	593	1,465.386	672	1,660.606	751	1,855.826
436	1,077.416	515	1,272.636	594	1,467.857	673	1,663.077	752	1,858.297
437	1,079.887	516	1,275.107	595	1,470.328	674	1,665.548	753	1,860.768
438	1,082.358	517	1,277.578	596	1,472.799	675	1,868.019	754	1,863.239
439	1,084.829	518	1,280.049	597	1,475.270	676	1,670.490	755	1,865.710
440	1,087.302	519	1,282.520	598	1,477.741	677	1,672.961	756	1,868.181
441	1,089.773	520	1,284.993	599	1,480.212	678	1,675.432	757	1,870.652
442	1,092.244	521	1,287.464	600	1,482.684	679	1,677.903	758	1,873.123
443	1,094.715	522	1,289.935	601	1,485.155	680	1,680.375	759	1,875.594
444	1,097.186	523	1,292.406	602	1,487.626	681	1,682.846	760	1,878.066
445	1,099.657	524	1,294.877	603	1,490.097	682	1,685.317	761	1,880.537
446	1,102.128	525	1,297.348	604	1,492.568	683	1,687.788	762	1,883.008
447	1,104.599	526	1,299.819	605	1,495.039	684	1,690.259	763	1,885.479
448	1,107.070	527	1,302.290	606	1,497.510	685	1,692.730	764	1,887.950
449	1,109.541	528	1,304.761	607	1,499.981	686	1,695.201	765	1,890.421
450	1,112.013	529	1,307.232	608	1,502.452	687	1,697.672	766	1,892.892
451	1,114.484	530	1,309.704	609	1,504.923	688	1,700.143	767	1,895 363
452	1,116.955	531	1,312.175	610	1,507.395	689	1,702.614	768	1,897.834
453	1,119.426	532	1,314.646	611	1,509.866	690	1,705.087	769	1,900.305
454	1,121.897	533	1,317.117	612	1,512.337	691	1,707.558	770	1,902.778
455	1,124.368	534	1,319.588	613	1,514.808	692	1,710.029	771	1,905.249
456	1,126.839	535	1,322.059	614	1,517.279	693	1,712.500	772	1,907.720
457	1,129.310	536	1,324.530	615	1,519.750	694	1,714.971	773	1,910.191
458	1,131.781	537	1,327.001	616	1,522.221	695	1,717.442	774	1,912.662
459	1,134.252	538	1,329.472	617	1,524.692	696	1,719.913	775	1,915.133
460	1,136.724	539	1,331.943	618	1,527.163	697	1,722.384	776	1,917.604
461	1,139.195	540	1,334.416	619	1,529.634	698	1,724.855	777	1,920.075
462	1,141.666	541	1,336.887	620	1,532.107	699	1,727.326	778	1,922.546
463	1,144.137	542	1,339.358	621	1,534.578	700	1,729.798	779	1,925.017
464	1,146.608	543	1,341.829	622	1,537.049	701	1,732.269	780	1,927.489
465	1,149.079	544	1,344.300	623	1,539.520	702	1,734.740	781	1,929.960
466	1,151.550	545	1,346.771	624	1,541.991	703	1,737.211	782	1,932.431
467	1,154.021	546	1,349.242	625	1,544.462	704	1,739.682	783	1,934.902
468	1,156.492	547	1,351.713	626	1,546.933	705	1,742.153	784	1,937.373
469	1,158.963	548	1,354.184	627	1,549.404	706	1,744.624	785	1,939.844
470	1,161.436	549	1,356.655	628	1,551.875	707	1,747.095	786	1,942.315
471	1,163.907	550	1,359.127	629	1,554.346	708	1,749.566	787	1,944.786
472	1,166.378	551	1,361.598	630	1,556.818	709	1,752.037	788	1,947.257
473	1,168.849	552	1,364.069	631	1,559.289	710	1,754.509	789	1,949.728
474	1,171.320	553	1,366.540	632	1,561.760	711	1,756.980	790	1,952.201

Hectares converted into acres—Continued.

Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.
791	1,954.672	833	2,058.459	875	2,162.247	917	2,266.034	959	2,369.822
792	1,957.143	834	2,060.930	876	2,164.718	918	2,268.505	960	2,372.294
793	1,959.614	835	2,063.401	877	2,167.189	919	2,270.976	961	2,374.765
794	1,962.085	836	2,065.872	878	2,169.660	920	2,273.449	962	2,377.236
795	1,964.556	837	2,068.343	879	2,172.131	921	2,275.920	963	2,379.707
796	1,967.027	838	2,070.814	880	2,174.603	922	2,278.391	964	2,382.178
797	1,969.498	839	2,073.285	881	2,177.074	923	2,280.862	965	2,384.649
798	1,971.969	840	2,075.758	882	2,179.545	924	2,283.333	966	2,387.120
799	1,974.440	841	2,078.229	883	2,182.016	925	2,285.804	967	2,389.591
800	1,976.912	842	2,080.700	884	2,184.487	926	2,288.275	968	2,392.062
801	1,979.383	843	2,083.171	885	2,186.958	927	2,290.746	969	2,394.533
802	1,981.854	844	2,085.642	886	2,189.420	928	2,293.217	970	2,397.005
803	1,984.325	845	2,088.113	887	2,191.900	929	2,295.688	971	2,399.476
804	1,986.796	846	2,090.584	888	2,194.371	930	2,298.160	972	2,401.947
805	1,989.267	847	2,093.055	889	2,196.842	931	2,300.631	973	2,404.418
806	1,991.738	848	2,095.526	890	2,199.315	932	2,303.102	974	2,406.889
807	1,994.209	849	2,097.997	891	2,201.786	933	2,305.573	975	2,409.360
808	1,996.680	850	2,100.469	892	2,204.257	934	2,308.044	976	2,411.831
809	1,999.151	851	2,102.940	893	2,206.728	935	2,310.515	977	2,414.302
810	2,001.623	852	2,105.411	894	2,209.199	936	2,312.986	978	2,416.773
811	2,004.094	853	2,107.882	895	2,211.670	937	2,315.457	979	2,419.244
812	2,006.565	854	2,110.353	896	2,214.141	938	2,317.928	980	2,421.715
813	2,009.036	855	2,112.824	897	2,216.612	939	2,320.399	981	2,424.186
814	2,011.507	856	2,115.295	898	2,219.083	940	2,322.872	982	2,426.657
815	2,013.978	857	2,117.766	899	2,221.554	941	2,325.343	983	2,429.129
816	2,016.449	858	2,120.237	900	2,224.026	942	2,327.814	984	2,431.600
817	2,018.920	859	2,122.708	901	2,226.497	943	2,330.285	985	2,434.071
818	2,021.391	860	2,125.180	902	2,229.968	944	2,332.756	986	2,436.542
819	2,023.862	861	2,127.651	903	2,232.439	945	2,335.227	987	2,439.014
820	2,026.335	862	2,130.122	904	2,234.910	946	2,337.698	988	2,441.485
821	2,028.806	863	2,132.593	905	2,237.381	947	2,340.169	989	2,443.956
822	2,031.277	864	2,135.064	906	2,239.852	948	2,342.640	990	2,446.427
823	2,033.748	865	2,137.535	907	2,242.323	949	2,345.111	991	2,448.898
824	2,036.219	866	2,140.006	908	2,244.794	950	2,347.583	992	2,451.370
825	2,038.690	867	2,142.477	909	2,247.265	951	2,350.054	993	2,453.841
826	2,041.161	868	2,144.948	910	2,248.737	952	2,352.525	994	2,456.312
827	2,043.632	869	2,147.419	911	2,251.208	953	2,354.996	995	2,458.784
828	2,046.103	870	2,149.892	912	2,253.679	954	2,357.467	996	2,461.255
829	2,048.574	871	2,152.363	913	2,256.150	955	2,359.938	997	2,463.726
830	2,051.046	872	2,154.834	914	2,258.621	956	2,362.409	998	2,466.197
831	2,053.517	873	2,157.305	915	2,261.092	957	2,364.880	999	2,468.668
832	2,055.988	874	2,159.776	916	2,263.563	958	2,367.351	1,000	2,471.140

Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.	Hectares.	Acres.
1	2,471.140	21	51,893.940	41	101,316.740	61	150,739.540	81	200,162.340
2	4,942.280	22	54,365.080	42	103,787.880	62	153,210.680	82	202,633.480
3	7,413.420	23	56,836.220	43	106,259.020	63	155,681.820	83	205,104.620
4	9,884.560	24	59,307.360	44	108,730.160	64	158,152.960	84	207,575.760
5	12,355.700	25	61,778.500	45	111,201.300	65	160,624.100	85	210,046.900
6	14,826.840	26	64,249.640	46	113,672.440	66	163,095.240	86	212,518.040
7	17,297.980	27	66,720.780	47	116,143.580	67	165,566.380	87	214,989.180
8	19,769.120	28	69,191.920	48	118,614.720	68	168,037.520	88	217,460.320
9	22,240.260	29	71,663.060	49	121,085.860	69	170,508.660	89	219,931.460
10	24,711.400	30	74,134.200	50	123,557.000	70	172,979.800	90	222,402.600
11	27,182.540	31	76,605.340	51	126,028.140	71	175,450.940	91	224,873.740
12	29,653.680	32	79,076.480	52	128,499.280	72	177,922.080	92	227,344.880
13	32,124.820	33	81,547.620	53	130,970.420	73	180,393.220	93	229,816.020
14	34,595.960	34	84,018.760	54	133,441.560	74	182,864.360	94	232,287.160
15	37,067.100	35	86,489.900	55	135,912.700	75	185 335.500	95	234,758.300
16	39,538.240	36	88,961.040	56	138,383.840	76	187,806.640	96	237,229.440
17	42,009.380	37	91,432.180	57	140,854.980	77	190,277.780	97	239,700.580
18	44,480.520	38	93,903.320	58	143,326.120	78	192,748.920	98	242,171.720
19	46,951.660	39	96,374.460	59	145,797.260	79	195,220.060	99	244,642.860
20	49,422.800	40	98,845.600	60	148,268.400	80	197,691.200	100	247,114.000

THE WOODS OF THE ARGENTINE REPUBLIC.

REPORT BY CONSUL BAKER, OF BUENOS AYRES.

In compliance with that provision of the Regulations which enjoins upon consular officers, among other things, the duty of transmitting to the Department information in regard to "the products of the forests" of the countries or districts under their supervision, I have in my annual reports made frequent reference to the timber resources of the Argentine Republic. Owing to the limited information, however, which I had on the subject, I was not able to make my reports so full or so authentic as I could have wished. I could only speak generally of the untold wealth which this country possesses in the immense forests which cover a large portion of the territory of the interior provinces. At the recent Continental Exposition, held in this city, however, the exhibits which were made of the various woods of the country were so numerous and so marvelous in their beauty that I have been interested in extending my inquiries in regard to the flora of the Argentine Republic, and the result has more than ever confirmed me in what I have heretofore said in regard to the timber resources of this portion of South America.

NO COMPLETE BOTANY OF THE COUNTRY.

As yet there has been no complete scientific exploration of the vegetation of this country; but the subject has occupied and is still occupying the attention of a number of well known scientists, some of whom are making their investigations under the special patronage of the National Government. Of course the fruit of their labors in regions so remote and so wild cannot be gathered in a day, but already no little headway has been made in the botanical survey of the country, and most important results, not only in the collection of specimens, but in the classification of trees, have been obtained. It appears that the first systematic study of the vegetation of the Argentine Republic was made by Dr. Lorentz, who was called from Germany to fill the chair of botany in the University of Cordova. He was succeeded in the same chair by Dr. Hieronymus, also of Germany, who has made the most complete collection of woods in the country that is to be found anywhere, and who informs me that he has now in press a report on the results of his studies. This, of course, is not yet accessible, and hence I am not able to profit by his labors. The information which I have embodied in this report has been obtained from a "report on the vegetation of the Argentine Republic," by Dr. Lorentz; from the late volumes of M. Martin de Moussy, in French, on the "geographical and statistical description of the Argentine Republic;" from a work on "the Argentine Republic," in German, by Sr. Ricardo Nap, formerly in charge of the Argentine national statistical office, and from information which I have derived directly from Prof. A. P. Burns, an American now resident in this country, and in charge of the national powder establishment at Rio Cuarto, all of which sources of information are supplemented by my own observations in various excursions through the different parts of the country. It is proper, however, to state that there are still many portions of the Republic, especially the formations of the Gran Chaco and Misiones, about whose flora very little is yet scientifically known, while much of our knowledge of other parts of the country may be only superficial.

THE DISTRIBUTION OF FORESTS.

I would premise by stating that the distribution of forests in the Argentine Republic is very unequal. While some parts are thickly covered with timber, other portions, though abounding in rich and succulent grasses, are entirely devoid of trees, corresponding in this respect to our western plains. Other parts, again, are almost without soil, and sterile, exhibiting only the scantiest manifestations of a stunted vegetation, while still others are covered to a more or less extent with bosquets of low shrubs or brushwood. Extending, however, as the Argentine Republic does, from Cape Horn on the southern extremity of Terra del Fuego (latitude 56° south, longitude 67° west), almost within the antarctic circle, to the regions of the tropics (latitude 20° south, longitude 58° west), the great diversity of vegetation in its 45,392 square geographical leagues of area can well be understood. On this account the surface of the country has been divided by some naturalists* into not less than nine different formations, corresponding to the species of flora which they afford, and to the physiognomy of their vegetation in general. While noticing these distinct groups it is not, however, necessary to do more than give a very general description of them, since some of them contain nothing which can be dignified with the name of timber. For the purposes of this sketch, which has nothing to do with the classification of the flora of the country, much less with their structural composition or physiological peculiarities, but simply with "the products of the forests," *i. e.*, their economic uses, as affording timbers, fibre, dye-stuffs, tanning materials, &c., it is much more convenient to follow the geographical divisions which naturally present themselves, since thus their localities can be better identified and understood.

TERRA DEL FUEGO AND THE ADJACENT ISLANDS.

I begin, then, at the southern extremity of the continent, which includes Terra del Fuego and the numerous adjacent islands. In regard to this region, which has never been fully explored, I am able to present but few data, for the reason that so little is yet known as to its flora. It is, however, reported to be most densely covered with forests, composed almost entirely of beechwood (*Fagus betuloides*) and winter's bark. This beech keeps its leaves all the year, having a foliage of a peculiar brownish-green color, with a tinge of yellow. Professor Darwin, who visited Terra del Fuego in 1832,† says it is almost impossible to find an acre of land not covered by the densest forests. He described the country as a mountainous land, partly submerged by the sea, so that deep inlets and bays occupy the place where valleys should exist. The trees, which covered the mountain sides from the very water's edge, reach to an elevation of between 1,000 and 1,500 feet, and are succeeded by a band of peat with minute alpine plants, and this again is succeeded by the line of perpetual snow, which, in the Straits of Magellan, descends to between 3,000 and 4,000 feet. There is but little level land, and where this happens to be the case, the surface is in many places a mere bed of swampy peat. Indeed, even within the forest, the ground is concealed by a mass of slowly putrifying vegetable matter, which, being soaked with water, yields to the foot.* On the eastern side, however, there are some open meadows fit for pasturage or cultivation.

---

* Professor Lorentz divides the vegetation of the Argentine Republic into the following formations: (1) Formation of the Puna; (2) Sub-tropical formation; (3) Formation of the Chaco; (4) Monte formation; (5) Formation of the Pampa; (6) Patagonian formation; (7) Formation of antarctic forests; (8) Paraguayan formation, and (9) Mesopotamian formation.

† A Naturalist's Voyage Around the World, by Charles Darwin, M. A., page 210, *et seq.*

FORESTS NORTH OF THE STRAITS OF MAGELLAN.

These magnificent forests extend northward from the Straits of Magellan along the Andes on both slopes to about 34° of south latitude. In fact it is not yet known definitely where they do terminate on the eastern or Patagonian slopes. Besides the almost impenetrable forests of beech trees, there is a thick underwood, consisting of a species of *Berberis* and other antarctic species, and the same thick layer of turf, which is so unisversal in Terra del Fuego. Indeed, excepting the timber and the turf, the vegetable kingdom produces here no useful object whatever. Nevertheless, in the hands of an energetic and laborious people, these forests of beeches could be exploited and made a source of untold wealth; but civilization has not yet penetrated these primitive regions.

EASTERN SLOPES OF THE SOUTHERN ANDES.

Further north, along these eastern slopes of the Cordilleras, in the neighborhood of the sources of the Rio Negro, there are forests of stately pines and wild apple trees, and it is here that the Patagonian Indians have their permanent settlement, in the midst of wide, open plains extending out from the sierras, well watered and clothed in most luxuriant grasses. Captain Musters, who penetrated these forests in 1869, speaks of them as "uniformly dense"; the trunks of the pine trees reaching a height of 60 to 100 feet, and entirely bare of branches for two-thirds of their height.† His descriptions, however, of the woods and rivers are too superficial to give us a clear idea of the flora of these regions. The Argentine Government is now exploring all the country along the eastern slopes of the Andes, with a view to opening it up to settlement and improvement. A report on the vegetation is now in press and will soon be issued.

---

* Professor Darwin describes an ascent he made of one of the mountains of this wild country, from which I take the following: "I was anxious to reach the summit of Bank's Mountain to collect alpine plants, for flowers in the lower part are few in number. We followed a water-course till it dwindled away, and we were then compelled to crawl blindly among the trees. These, from the effects of the elevation and of the impetuous winds, were low, thick, and crooked. At length we reached that which from a distance appeared like a carpet of fine green turf, but which to our vexation turned out to be a compact mass of little beech trees about 4 or 5 feet high. They were as thick together as box in the border of a garden, and we were obliged to struggle over the flat but treacherous surface. After a little more trouble we gained the peat, and then the bare slate rock. We obtained a wide view over the surrounding country; to the north a swampy moorland extended, but to the south we had a scene of savage magnificence well becoming Terra del Fuego. There was a degree of mysterious grandeur in mountain behind mountain, with the deep, intervening valleys, all covered with one thick mass of forest. The atmosphere, likewise, in this climate, where gale succeeds gale, with hail, rain, and sleet, seems blacker than anywhere else. In the Straits of Magellan, looking due southward from Port Famine, the distant channels between the mountains appeared from their gloominess to lead beyond the confines of this earth."

† See "*At Home with the Patagonians*," by C. G. Musters, pages 113 to 160.

FORESTS OF THE CORDILLERAS OF PATAGONIA.

The line which separates the plains of Patagonia from this fertile mountain region, with its wealth of timber, is very sharply defined. Beginning at Cape Negro, Magellan Straits, at latitude 53° south and longitude 75° 50′ west, it runs west-northwest to the northeast extremity of Otway Water, following the channel of Fitzroy Passage and the northern shores of Skyning Water to longitude 72°, and then extends along eastern shores of Desolation Sound and Kirke Water; running thence due northward towards Lake Viedora, Lake Argentina, and Lake St. Martin, which are, respectively, the sources of the rivers Santa Cruz, Sheuen, and Chico, that traverse the territory of Patagonia and empty into the Atlantic Ocean. Beyond these it continues northward to the sources of the Rio Negro, which waters, with its numerous branches and affluents, a large territory stretching along the base of the Cordilleras towards the province of Mendoza. Señor Morena,* who has explored the Rio Santa Cruz to its headwaters, speaks generally of the "immense virgin forests" which he found at the base of the mountains. But the entire region of Patagonia eastward of these timbered districts is a succession of sterile plains, which rise from the coast, one above the other, like terraces,† uniformly about 300 feet high, and are traversed occasionally by ravines and flat-bottomed depressions, some of which contain salt lakes. These wastes stretch away in dreary uniformity without a break to the far horizon, presenting a barren landscape so grim and so monotonous as to fill the traveler with a feeling of awe. The formation of the land is tertiary, resting on porphyry and quartz, ridges of which often protrude through the surface. In some parts they are capped by layers of lava. The soil is sandy and covered with water-worn stones, with here and there an isolated tuft of grass, withered and gray, whilst a peculiar gloom is further added to the melancholy of the scene by the somber hue of a straggling, stunted bush, the *jume* (*Salicernia*), which grows in considerable quantities, and which is described as a fit offspring, in its blackness and ugliness, of such uncongenial soil.‡ Further than this, if we except the *calafaté* (*Berberis axifolia*), also a miserable thorny shrub, which, however, would anywhere else be admirably adapted for live fencing, there is nothing on these arid plains which can be called timber, though in the valleys of the rivers, especially those emptying into the ocean north of 40° of latitude, there is a species of willow (*Salix humboldtiana*) which grows to very large proportions, and, in the absence of anything better, is used for building purposes.

THE TREELESS REGIONS OF THE PAMPA.

The river Colorado, which empties into the Atlantic Ocean in latitude 39°, is the northern boundary of Patagonia, on the north side of which begin what are known as the Argentine pampas,§ the soil of which is a complete contrast to that of the former region. They occupy the entire area of the province of Buenos Ayres and extend into those of Santa Fé, Cordova, San Luis, and Mendoza. They seem to be uniformly level.

---

[*] *Viaje a la Patagoniá Austral*, 1876–'77, *par Francisco P. Morena*, p. 460.

[†] Darwin accounts for the regularity with which these plains rise one above the other by the supposition that the land has been raised in a mass from under the sea, the upheaving movement having been interrupted by at least eight long periods of rest, during which the sea ate deeply back into the land, forming, at successive levels, long lines of escarpments, which separate the different plains.

[‡] "Wanderings in Patagonia," by Julius Beerbohm, 1876, pages 22 and 105.

[§] In the language of Quichee Indians "pampas" means *level*.

but these boundless plains rise gently in every direction from the sea, at first at the rate of about one foot per mile, and then more, until the large plateaux near the Cordilleras attain an elevation of 2,000 feet above the level of the sea, and ultimately terminate in the high parks of the Andes. The character of the soil corresponds to the inclination as though the continent had been formed by some great flow of waters depositing bowlders and rocks near the mountains, then districts of pebbles and water-worn stones, then coarse gravels and sands. and lastly the finer sands and clayey deposits which cover the great alluvial plains, and which are evidently the *débris* of the crystalline rocks of the mighty range of the Andes leveled and sorted by the action of water. The surface of all this vast area is covered by the richest of succulent grasses, but normally it is without a tree or a ligneous plant. It is a magnificent pasture ground, but its flora is poor and monotonous. It is remarkable that a soil on which timber grows so luxuriantly when planted should from time immemorial be so totally destitute of forests. The only exception is that in the sierras of Tandil, 200 miles south of Buenos Ayres, there is a region of dense brushwood called *carmamoel* (*Colletia cruciata*), which grows about the height of a man, and which has no leaves but is covered with sharp thorns in the shape of a cross. And another exception consists in a strip of woods which extends from the latitude of Buenos Ayers down along the Atlantic coast composed principally of good-sized trees of the *tala*, *coronillo* and *espinillo*, which are used for various economical purposes. As a proof that the soil of the pampas is perfectly adapted to arboreous vegetation, I would mention that in various parts there are now extensive belts of cultivated timber, among which is the peach tree which produces both fruit and fuel, also several species of the *Eucalyptus*, the *Robinia*, the Paradise tree, and the Lombardy poplar, all of which grow with facility and rapidly, and are used not only for shade but for many economical purposes. There is one tree indigenous to the pampas which I should mention from its singular character. I refer to *omber* (*Percunia divica*). At a distance it is one of the most attractive objects. It grows to immense proportions, with gnarled roots and knots projecting up and around the trunk in all manner of fantastic shapes, and affords a wide-spreading shade of dark velvety leaves, a most refreshing resort for the *siesta* of a weary traveler; but for the rest it is utterly worthless. Its wood is really not ligneous, having neither fiber nor consistency, and resembling punk or a sponge more than anything else. These trees, if trees they may be called, do not grow in forests, but only singly and isolated, here and there at long intervals, being landmarks on the far horizon—sentinels, as it were, of the pampa.

THE TREES OF THE EASTERN SLOPES OF THE ARGENTINE ANDES.

Where the pampas approach the western mountains, all along the outlying slopes of the Cordilleras of the Andes, but distinct and isolated from them, and extending northward to the confines of Bolivia, there is a formation partly composed of open forests and partly of shrubs and ligneous plants, which the scientists have designated by the name of the Monté formation. It embraces a great part of the western slopes of the seven Andine provinces, to wit, Mendoza, San Luis, San Juan, Rioja, Catamarca, Jujuy, and Salta. Professor Groesback, in his celebrated work, the "Vegetation of the Earth," calls it the "Chañar Steppe," from the arborets of that name which are so generally distributed through it. The trees which constitute this formation consist principally of species of *prosopis*, *mimosa*, and *acacia*. They are at first found in rather diminutive forms, and bristle with scattered branches provided with thor or thorny leaves, but as you reach the higher elevations, where t "Puna formation" proper is found, the extended plains and broad va leys are thickly wooded with immense specimens of the same type trees, growing far up on the mountain sides. In some parts, and e pecially in the sierras of San Luis and Cordova, these forests are beautiful and picturesque in their arrangement that they look like ar ficial parks.

Among the most noted of the trees which characterize these eve changing landscapes is the *algarrobo* (*Prosopis alba*), specific gravity 0.74 The size of this species varies, according to locality, from mere bush to quite lofty trees, branching, however, at a short distance above t ground, with thin tops of feathered leaves. While the timber is mu esteemed for construction, its fruit, which is a pod of sweet pulp, is excellent food for cattle. The natives also make a species of bread o of it called *patao*, and also extract a liquor from it which when new quite refreshing, but after fermentation is very intoxicating, and hen is a favorite beverage at some of their social meetings.

The nandubay (*Acacia cavernia*) is a small tree, whose hard and hea wood make it much sought after for fence and telegraph posts. It said to be almost indestructible, neither air, water nor earth havi any effect upon it. It produces a fruit which contains a great deal tannin, and is also employed as a black dye. Specific gravity, 1.100 1.221.

The *Acacia moliniformus* bears a fruit also much sought after cattle, though most of the species are characterized by such eno mous thorns that in some parts the woods are almost impenetrable. would add that a gum exudes from these trees which I believe cou be made into gutta percha if the proper processes were employed.

Another very important tree found in this formation is the *quebrach* the most frequent variety of which in these forests is the white (*asp* *dosperma quebracho*). It is of middle size, with oblong thorny leaves. forms great forests in some districts, and its timber is very useful f various purposes, and latterly has been applied in the xylographic ar It takes an exquisite polish. Specific gravity, 0.880.

The *moyes* or *molles* is also a valuable evergreen tree and exceeding beautiful in its appearance. One species produces a fruit from which prepared a sweet, aromatic, refreshing liquor; another variety bears berry from which incense is manufactured, and still another is used fo tanning purposes, while a fourth variety (*alvarillo del campo*) is note for its savory and refreshing fruits, which are very similar to plums and only the more agreeable because they contain a certain after-tast of bitter almonds. Specific gravity, 0.520.

The *chañar* (*Gurliaca decorticans*) is found everywhere throughout th submountainous regions, and its wood is much appreciated on accoun of its firmness and durability. It produces a sweet and savory fruit and has the peculiarity of annually renewing its bark. Near the tropic it attains large proportions, though its trunk is irregular. Specifi gravity, 0.568.

GIANT CACTI FORESTS.

There are many other trees in this formation, but they are small an have no value for timber purposes; and also a great variety of shrub and brushes, to say nothing of vines, parasites, epiphytes, air-plants &c., though they do not come within the scope of this sketch. I mus however, refer to the family of the cacteæ, which are as strange in for as abundant in distribution. They attain to immense proportions, some of them reaching a height of 40 feet, with trunks in proportion, and their wood is used in different industries and also in the mines. In a late visit to the northern provinces I passed through a forest of these gigantic cacti. It was one of the strangest and most weird sights that can well be imagined. They stood in groups. Here they frowned upon us spherical and spirated with formidable thorns nearly a foot long, and yet from their grooved sides radiating most delicate flowers; there they rose in tall fluted columns like ancient ruins, or with their long-jointed arms in menacing attitude, looked like giant witches beckoning you to stop; and yonder through the vista they were trailing like huge serpents over fallen trees or coiling in the crevices of the outcropping rocks. The largest species is the *cereus*, the flowers of which are white; those of the *opunciæ* are orange color or yellowish red, while the serpent-formed *cacteæ* have lively red flowers. One species produces the *tunas* or "figs of Algiers," some breed the cochineal insects, the cultivation of which is now carried on to some extent in Tucuman, and which, if proper methods were adopted, could be made of great importance to the country. At present the natives gather the eggs of the insects and make them into dry compressed balls or cakes weighing about a half pound each, which they sell for a dollar apiece for commercial purposes.

THE GREAT SUBTROPICAL FORESTS.

We now approach what is designated by Moussy as the "tropical" and by Professor Lorentz as the "subtropical" forests. This formation is the garden of the Argentine Republic, and presents to us landscapes of such magnificence and fertility that we seem to be wandering in an enchanted wilderness. It exists in the high table-lands on the eastern ranges of the Cordilleras and their branches, whose waters are drained by a thousand streams and water-courses towards the Paraná and its great affluents. These plains and watersheds are all adorned with the rankest of tropical forests, which pass to the northward beyond the confines of the provinces of Salta and Jujuy into the territory of Bolivia, thus reaching to the latitude of 21° south.* Nearly all the varieties of trees which characterize the preceding formations are here found in more accentuated proportions, while it is rich with the magnificence of a hundred additional species, many of them so covered with *epiphites* and air-plants, that it is sometimes difficult to discover the verdure of the tree to which they are attached; and both trees and plants producing flowers of many brilliant colors. Gigantic *lianae* twine around the trunks and drop their air-roots to the ground, while their branches reach out and involve the branches of other trees in the vegetable mesh. Sometimes trees are seen growing upon other trees, their roots buried in the dust, which through centuries has been accumulating at the foot of the branches. On one occasion, in climbing to the heights of the Sierra Aconquija, in the vicinity of Tucuman, I undertook to penetrate this wealth of vegetation which fairly filled the gorges leading to the table-lands above, and where for ages the sunlight had been shut out from the earth by leagues upon leagues of arboreal giants; but the wild and tangled mass of undergrowth disputed every foot of approach, and I had to relinquish the attempt.

---

* On crossing the Rio de las Piedras, a river of the province of Salta, we entered at once the territory of Oran, the extreme northern limit of the republic, which lies just above the tropic of Capricorn; our path still lying through dense forests, whose stems were frequently rendered completely invisible by reason of the close clasp of the thick and tangled mass of creepers which, in full flower, not alone from summit to base, but roofing the lofty vault with superb campanulate rounded heaps of blue, white, violet, and rose, emitted overpowering but delicious perfumes. * * * Our course was soon arrested by another river, the Santa Maria, and on reaching its further bank we entered the densest forest I ever saw; not the cathedral-like columnar-stemmed trees, rising 70 or 80 feet without a limb, and then surmounted by a branched, leafy, floral dome, such as I had seen in other parts of the country, but an impenetrable mass of entwined, gnarled, fantastic plant development, confusing trunks, branches, foliage, and flowers in one inextricable melange from top to bottom. Two growths contributed to this effect; one superior, of massive size and impending, the other inferior and consisting principally of wild orange-groves, &c.—(White's Note Book of a Naturalist, vol. II, p. 307.)

It seems almost impossible to exaggerate the wealth of timber which is found in these high latitudes. There is hardly a tree but possesses some special value for particular purposes. There is, in the University of Cordova, a very rich display of many of the varieties, being sections taken from the trunks and polished. They uniformly exhibit an exceedingly fine grain, embracing every shade of color, from the richest rose to the deepest green, from the darkest ebony to the lightest cream, some with most exquisite veins and others with manifold variegated hues. In any other country than this they would be esteemed as precious woods, equaling and rivaling those of Central America or Brazil, but they are at present so remote from market that for commercial purposes many of them are yet almost valueless. I could hardly undertake, within the limits of a sketch like this, to give a detailed description of all the trees composing the magnificent forests of the province of Tucuman and the valleys of Salta and Oran, so admirably fitted, as they are, for the purposes of the engineer, the builder, the cabinet-maker, the shipwright, the tanner, and the dyer. I can only assume to mention a few of the most important, so far as Professor Lorentz and others have identified them; though in some instances the scientific names may not be entirely reliable, since, in different parts of the country, the same popular name is given to trees which differ very materially and sometimes have nothing in common save the indigenous name. Besides those which I have already referred to as especially characterizing other portions of the republic, but which are also found in this zone, I would mention the following as the most common and most magnificent:

The laurel (*Nectandra porphyria*), which is a very beautiful tree, with a huge trunk and a dense crown of pinnated leaves, growing to the height of 60 or 70 feet.* There are several species, all of which are abundant and valuable, especially for cabinet-work, and one of which contains camphor in its leaves; it rivals ebony in color and polish. Specific gravity, 0.580 to 0.845.

The *tipa* (*Machærium fertile*), also possessing a splendid form and rising to the height of 150 feet, with a straight trunk, which branches about 70 feet from the ground. In the spring it is covered with papilionaceous flowers, producing a beautiful effect from a distance; easily worked; used for railway plant. Specific gravity 0.660.

The *nogal* (*Fulgans nigra*), very similar to the European walnut, and producing an edible fruit, and, on account of the ease with which it can be worked and the fine lustrous polish it takes, it is much used in cabinet-work. Specific gravity, 0.538.

---

* Mr. White, in his Notes of a Naturalist, says: "Throughout the forests of Tucuman the laurel is everywhere found, sometimes forming extensive forests, in whose recesses numerous freebooters found, of yore, shelter and safe concealment. Imagine gigantic trunks, some nine feet in diameter, jostling one against the other and rising perpendicularly 70 feet, crowned with an ample and elegant nimbus. Beyond the mere grandeur and poetry of the scene, the centuries that these patriarchs have scored their bark, what an inexhaustible commercial and medicinal wealth for future ages!" Vol. 11, p. 139.

The *ramos*, two varieties (*Cupania uruguensis* and *C. vernalis*), greatly resembling the nogal in appearance and uses, but very hard, indeed almost impermeable. Specific gravity, 0.576.

The *cedro* (*Cedrela braziliensis*). There are several varieties, all producing a most beautiful wood, soft and easily worked, and therefore in great demand, being used for furniture, and resembling mahogany in its polish and the rich veins which it possesses. Specific gravity, 0.480 to 0.740.

The *mato* (*Eugenia mato* and *E. uniflora*), two magnificent species of the *Myrtaceæ*, with myrtiform leaves and edible fruit of the size of a cherry. The wood is rich in its colors and is used in decorative carpentry. Being tough and flexible, it is also much used for poles to carriages. Specific gravity, 0.890.

The *palo de San Antonio* (*Myrcine floribunda*), a tree of majestic proportions in the primitive forests, and producing excellent building timber. Specific gravity, 0.695.

The *lanza* (*Myrcene marginata*), also a very majestic tree, and takes a beautiful polish, thus making it desirable for furniture. Specific gravity, 0.738.

The *lapacho* (*L. bignonaceæ*), belonging to the genus *Tecoma*, a tree of great dimensions and very beautiful. It would be almost impossible for the vegetable kingdom to present a more imposing spectacle than these gigantic trees when their branches, dark and leafless during the winter, are covered in the spring with millions of yellow or rose-colored flowers, which precede the sprouting of the leaves. The wood is of a green color, hard, heavy, and solid, and susceptible of a very fine polish. It is greatly appreciated in all kinds of constructions. It has the property of becoming petrified upon exposure to the air, sand, or water. The bark possesses coloring material, and several different dyes are made from it. Specific gravity, 1.072.

The *palo borracho* (*Chorisia insignes*), a very singular tree,* with a swollen, oval-shaped trunk, covered with blunt, quadrangular thorns, digitated leaves, large white flowers, and the fruit full of a species of white cotton of little coherent fibers, used for making cloth, lampwick, &c. The form of this tree is one of the most singular to be seen in the country.

The *urundey*, a species of *bignoniaceæ*, a very abundant tree, and produces a most excellent wood. It is imperishable, polishes exquisitely, and makes beautiful furniture. There are two kinds: the black with white veins, and the white with jasper, black, and yellow veins; thus producing a very unique veneering. The wood is used for joists, pillars, columns, and ship-timbers, and is the best timber known for railway ties and sleepers; also excellent for axletrees on account of its resistance and inflexibility. The tree reaches the height of 100 feet and a diameter of 8 feet. Its leaves are lanceolated, and its bark, which is not very thick, is preferred for tanning hides. Owing to the difficulty of transporting them, the lumbermen do not fell the largest trees. Specific gravity, 1.092.

---

* Proceeding over some low hills, a very peculiar looking tree presented itself, which the natives call *palo borracho* (drunken tree), but the Indians call *yuchen*, standing about 50 feet high and spreading from the crown branches covered with digitated eaves, dotted here and there with large white flowers whose naked stems before branching expand into one immense egg-shaped form fully 20 feet in height and 24 feet in circumference, sounding hollow when struck, and whose bark is covered with hard, short, quadrangular, blunt spines. The specimen I here saw was certainly full grown, and this remarkable tree is only found on elevated, rocky ground. The nhabitants of this province (Catamarca) and Santiago, scoop out the spongy center and use the hollow, barrel-like stem as a storehouse, whilst in some parts of South America the stems are cut in half, and form capacious Dutch-like canoes. The seed-pods, likewise of egg shape, and about the size of the human fist, contain abundance of cottony, fibrous down, from which are manufactured cloth, candlewick, and pillows, which latter, besides being delicately soft and springy, have proved beneficial to con-umptive patients. When they get matted exposure to the sun soon renders them once more puffy and elastic. (Cameos from the Silver Land, by Ernest William White, F. Z. S. London, 1882.)

Palo blanco, a large tree whose wood is of a straw color, whereas the bark is whitish. In spite of its great height and circumference large timber cannot be procured from it, for the reason that the trunk is deeply fluted, having somewhat the appearance of a Corinthian column. Its wood is very highly grained, and resists friction with such persistence that it is considered the very best material for ship-blocks. The wood is aromatic and similar to mahogany in its color and quality. Specific gravity, 1,010.

The *titané*, of which there are two varieties, the white and the yellow; much used in the construction of fine furniture. The bark possesses a piquant juice. The tree attains to the height of about 50 feet and is about 1 to 3 feet in diameter. The wood, which polishes beautifully, has the advantage that it neither swells nor shrinks according to the state of the temperature. Specific gravity, 0.650.

The *cibil* (*Piplàdemia cibil*). There are several varieties of these acacias, the white, the red, &c., all of which, though found elsewhere, reach to large proportions in the subtropical forests, attaining a height of 40 feet and a diameter of 2 feet. The bark is rich in tannin and is in great demand for that purpose. The wood is very hard and takes a lustrous polish. Specific gravity, 0.854 to 0.956.

The *espinillo* (*Acacia cavenia*), a different tree from the shrub of the south, but a magnificent variety of the family of *Leguminosæ*, having no thorns and producing an excellent wood for various purposes. Specific gravity, 0.766.

The *mora*, a very large tree, with heavy yellow wood, which grains beautifully, and on being worked takes the color of the richest mahogany, and is greatly used for the manufacture of the best furniture. The tree produces an edible fruit. Specific gravity, 0.935 to 1.090.

The *quebracho colorado* (*Loxopterygium lorentzii*). Quite a different tree from the *Q. blanco* found elsewhere. It is very abundant throughout the northern portions of the Argentine Republic. The wood is a deep red, and remarkable for its extreme hardness and weight. It is almost indestructible. Since the discovery of the country it has never been found rotten or decayed, no matter in what position, in air, earth, or water, it might be placed. It forms a most important article of commerce, and, owing to the immense size to which it grows, upwards of 200 feet with 10 feet of diameter, is used for ship-timber, beams, spiles, joists, bridges, &c., and makes most enduring railway sleepers and ties. It also takes an exceedingly fine finish, and is greatly in demand in carpentry work for doors, window-frames, cabinets, &c., the luster being equal to that of rosewood. In wood engraving it takes the place of box wood. Specific gravity, 1.234 to 1.392.

There are many other valuable trees of the largest size found in this part of the country, among them the *quina-quina*, which produces an aromatic resin, and whose bark is used as a fever antidote and tonic; the *cascaion*, with a red and lustrous bark; the *palo mortero*, very similar to the tipa already described; the *pacay*, the *sinquillo*, the *mayana itara*, and others not yet classified, all of which furnish most valuable timber, each one with some certain quality for certain uses, such as building, turning, furniture, cabinet-work, &c., but I have no descriptions of them. In the subtropical forests, which we are considering, there are also numerous smaller trees, nearly all of them hard wood, bearing a rich foliage and exceedingly ornamental; also a great variety of arborets, bushes, climbing plants, &c., many of them of exquisite coloring in their leaves and flowers, but it hardly comes within the object of this sketch to mention them.

In the mountains of the Andes, beyond the chain of the Aconquija, and on the slopes of the Cordilleras proper, is found in extensive forests the pine tree (*Podicarpus augustifolia*). It is of medium height and of compact crown, but it is not similar to the European pine. The inhabitants utilize the timber, but there is no demand for it, on account of its inaccessibility to the market, and it is at present of but little importance in the economy of the country.

TIMBER RESOURCES OF THE GRAN CHACO.

Along the eastern borders of the subtropical regions whose forests I have been describing, lies an immense territory, in some parts reported to be arid and waste for want of water, but in others filled with a succession of rivers, and in time destined to be one of the most valuable portions of the Argentine Republic. It is called the "Gran Chaco." It extends from the Paraná to Bolivia, and is separated on the east from Paraguay by the river of the same name. The last Argentine census gave it a superficial area of 621,000 square kilometers, but as its limits have not yet been fixed with the neighboring provinces, its real area cannot yet be determined. It is divided by the river Vermijo into two almost equal parts, one called the "Chaco Austral" and the other "Chaco Boreal," the last extending to latitude 20° south, and bounded on the north by the Bolivian province of Chiquitos. The "Chaco Boreal" is composed of an uninterrupted plain elevated about 400 feet above the level of the sea, with a heavy soil of humus, and is divided into the most beautiful forests with intervening meadows as if made on purpose for the raising of cattle. The Austral or Southern Chaco lies between the Vermejo on the north, the Paraná on the east, and the province of Santa Fé on the south. It is also completely level and is richly endowed by nature, not only with a deep soil but with most magnificent forests. As yet these vast regions are almost exclusively occupied by wild Indians. A large portion has never been explored, and hence but little is yet known of the interior with its treasures of vegetable wealth. Only where it skirts along the Paraná and Paraguay Rivers, with here and there a small clearing and settlement, the nucleus of a number of agricultural colonies, has anything been scientifically determined in reference to its timber resources. As far, however, as its fastnesses with their succession of small rivers and water-courses have been penetrated they are found to be covered with the densest forests of lofty trees descending down to the river line. The growth may not be quite so noble and sky-piercing as that which is found in the forests of Tucuman and Oran, but it embraces, so far as is now known, quite the same varieties and an equal abundance. And the region possesses this immense advantage, that by means of the great water-courses flowing along its eastern borders and the smaller streams, including the Vermejo and Pilcomayo, which penetrate its interior and which are found to be navigable for many hundreds of miles, all its vast wealth of precious woods and valuable timber is rendered accessible not only to Buenos Ayres, but, as ocean ships can load along its banks, also to the markets of the world, without the necessity of transshipment. As I have said, the more elevated portions of the Chaco present a landscape like a park where clumps of woods alternate with open meadows. The lower parts are covered with continuous forests and an undergrowth which in some places is so dense as to make it impossible to penetrate into the interior. But the wood-choppers are at work, and the quantities of all kinds of precious woods which are shipped down the rivers are becoming greater and greater every year. As yet the greatest demand in this market is for the *quebracho* of both varieties, which finds a use in almost every kind of construction. The *algorrobo* is also in great request, as likewise the *nandubay*, immense quantities of the posts of which tree are used for wire-fencing on the Pampas. Besides what comes to Buenos Ayres, however, there are ship loads after ship-loads, which are exported directly to Germany and France, and there made into the most costly articles of furniture, or sawed up into veneering which rivals anything which comes from Brazil or Central America. I have said that nearly all the varieties of trees which I have heretofore described as belonging to the subtropical forests are also to be found in the Chaco. There are also numberless varieties which seem to be especially indigenous to that region. Among these are the following:

The *blanco grande*, a beautiful tree which grows to the height of 25 feet and is 18 inches in diameter. Its wood possesses a very fine fiber, and is used for mechanical moldings, and also for cabinet work. Specific gravity, 0.720.

The *carandá*. It belongs to the family of the *algorrobos*. It grows to the height of 30 to 40 feet, with a trunk of 18 inches in diameter. The color of its wood is violet, very solid, and of an excellent grain, and valuable for furniture and cabinet work. Specific gravity, 1.197.

The *carapay* (*Acacia altramentaria*), a large and beautiful tree. The bark is used for tanning hides and is an important article of commerce. The wood is red, with black veins, which polishes exquisitely and is used for fine furniture, cabinet work, and veneering. The wood is very durable and is excellent for railway sleepers. Specific gravity, 0.977 to 1.180.

The *cuirú*, one of the tallest trees to be found in the Chaco. It attains a height of over 150 feet, with a diameter of not more than 4 feet. Excellent for masts, yard-arms, rafters, &c. Specific gravity, 0.580.

The *timbó*. This is also a large tree, having a height of 70 to 80 feet and a diameter of 3 to 3½ feet. It is a soft wood of about the consistency of pine, though in color it resembles cedar. It is greatly used and makes excellent flooring, weather-boarding, &c., having the good quality of not warping, though flexible and light. Specific gravity, 0.425.

The *palma* (*Copernica campestris*). Several varieties, and especially the black and the yellow palm, are found in the Chaco, where they occupy large tracts in forests by themselves. They attain to a height of 30 to 40 feet, with a trunk of 1 to 2 feet. These varieties are also found in the province of Cordova. Fans are made of the leaves, and its fruit is very sweet and much sought after by animals as well as men. Sweetmeats are also made of the dried dates, from which likewise a species of rum is distilled. The timber is not worth much, except for corrals and other fencing. The effect produced by these immense forests of palm trees, with their trunks all bare and their round thick crowns, all exactly uniform, is very picturesque and inviting. Specific gravity, 0.960.

The *guayairi*. This tree grows to the height of 30 to 40 feet, with a foot diameter. It produces a very white wood with a black heart, and owing to its strength is used for lance-heads, oars, handles of tools, &c. Specific gravity, 0.907.

Besides these trees there are others equally well known, such as the *mora*, the *olmo* or elm, the *blanquillo*, the *ciñal*, the *peterébi*, but I have no description of them, and others still whose Indian names, much less their botanical, I am not able to give. Indeed, so little is yet known in regard to the forests of the Chaco, that Professor Lorentz still calls it a *terra incognita*, so far as science is concerned. The number of smaller trees, arborets, shrubs, &c., which occupy that vast region have also yet to be studied, though there is one, called the *chaquar*, of the family of *Bromeliaceæ*, which is a characteristic plant of great utility to the Indians. They make ropes, house lines, and cloths of different kinds with its fiber, and especially shirts or *ponchos*, which serve as cuirasses, being impervious to arrows; also fishing nets, baskets, &c. They also eat its bulbs, and its fruit serves as a very piquant condiment. The *vinagrilla* is another shrub which produces a pod as acid as vinegar. The *pirchuna* is used for the manufacture of brooms. The *alamisca* bears a berry, which is said to possess the intensest bitter known. The *avarillo* produces a delicious almond.

FORESTS OF THE ARGENTINE MESOPOTAMIA.

We now come to the Argentine Mesopotamia, as all that tract of country is called which is embraced between the Uruguay and Paraná Rivers, extending from the island of Martin Garcia, opposite Buenos Ayres, northward to the borders of Brazil, a region of over 1,000 miles in length, and varying from 50 to 200 in breadth. It comprehends the provinces of Entre Rios and Corrientes, the territory of Misiones, and the Republic of Paraguay, as also the thousands of islands which dot the two great rivers named. The vegetation of the shores of the Uruguay in great part consists of forests composed of a palm tree called the *coco yatai*, also the *coco australis* and other species of the cocoa-nut tree, also a bamboo called *tacuará*, and the *inga*, a very large tree of the *Mimosa* family, while farther up the river, approaching the "Misiones," are found the *urundey*, the *lapacho*, the *timbo*, &c., but they do not attain to a very massive growth until about the twenty-eighth degree, from which point northward the vegetation exhibits an extraordinary development, quite corresponding to that of Brazil. The shores and islands of the Paraná River, having a soil less argillaceous than those of the Uruguay, present a different arboreal growth. The delta of the Paraná abounds in willows, one variety of which, called the *sarandi*, is a very rapid grower, and is used for fire-wood. There is also a most exuberant growth of wild peach trees and orange groves. The former is also used for fire-wood, while the fruit finds a market in Buenos Ayres. The oranges of the littoral are rather sour, though they improve upon being transplanted. The bitter orange, which also grows here, is used for the manufacture of a favorite beverage. As we advance up the river the islands more and more exhibit the characteristics of the Chaco formation.

If now we penetrate into the interior of the Argentine Mesopotamia, we will find forests of the harder and more useful species, such as the *talas*, the *chañares*, the *algorrobos*, the *quebrachos*, the *vivaros*, the *naudubays*, &c., all of which varieties line the water-courses and fill the bottom lands of Entre Rios, and form to the northwest the great forest of Montiel, which covers the sixth part of that province. The province of Corrientes is even more woody, and with a more tropical development until we reach "Misiones" and the neighboring Republic of Paraguay which offer a wealth of timber, rivaling anything that can be found even in the far-famed regions of Oran, not only in dimensions, but also in the fineness of the grain. Most of the varieties which compose the forests of the Gran Chaco are also indigenous to the "Misiones" and Paraguay, while there are a great number of new species, many of which having never been scientifically classified, still flourish under the names given them since time immemorial by the Guarané Indians.

During the recent Argentine National Exposition held in Buenos Ayres, there was on exhibition a most magnificent collection of the various woods which are found in the above regions, consisting of lateral sections of the trees, exquisitely polished so as to exhibit the grain and texture. The collection was credited to Paraguay, but it corresponds equally well to the upper portions of the province of Corrientes and the territory of Misiones, and as it embraces nearly or quite all the valuable timber indigenous to those regions, I give the list complete according to the names by which the trees are locally known.

TREES OF THE MISIONES AND PARAGUAY.

1. *Sapyy*, a large tree suitable for various uses.
2. *Ibyra-yu-quazú*, large and grows to a grand height with dense foliage timber valuable for building purposes.
3. *Laurel amarillo*, the yellow laurel, also an immense tree, beautifully grained, and useful in all kinds of construction.
4. *Quebracho*, like that found in other subtropical regions, very hard and heavy and quite indestructible; serves for various purposes
5. *Ibyrá-pitá*, a large tree with very hard wood, used in carpentry work
6. *Cedro colorado*, the red cedar, a very light wood which is as soft as satin, employed in cabinet work, and resembles mahogany in its beautiful veins.
7. *Timbó*, a large and bushy tree with white wood, very light, and the natives make canoes of it.
8. *Lapacho piruzú*, a variety which has exceedingly fine fibers, used for cabinet work and other constructions of the first-class.
9. *Lapacho*, the same valuable tree which has heretofore been referred to.
10. *Urundey-mi*, a tree of ordinary size, but much used for various purposes in carpentry work.
11. *Guayaybi*, a small, flexible tree, used for handles of tools and other things.
12. *Curupay-guazú*, a tree of grand proportions, used for the manufacture of furniture, owing to the fine polish it takes.
13. *Curupay-rau*, rather a small tree, used for cabinet work.
14. *Urupiu pita*, fine grained, and used for the same purposes as the preceding.
15. *Yuqueri-busu*, an immense tree, used in heavy constructions and house-carpentry.
16. *Ibyra-poroité*, of ordinary size but very fine grain, and useful for cabinet work.
17. *Urupiu-mi*, a very large tree, whose timber is used for planking and furniture.
18. *Camba-acá*, a small tree with exceedingly hard wood; has various uses.

19. *Espina de corona*, an immense tree; wood very hard; in general use for heavy timbers, but takes a beautiful polish, and valuable for various purposes.
20. *Arrayan*, of ordinary size, used in decorative carpentry.
21. *Incienso*. This is the incense tree, so called from the pungent smell of the resin which exudes from it; a very large tree, used for cabinet work.
22. *Guabirá*, a large tree which bears a delicious fruit; the timber used in carpentry work and for other purposes.
23. *Iba-hai*, a tree of rather large proportions, whose timber takes a fine polish and is useful in cabinet work.
24. *Yatayrá*, large, but of little use.
25. *Caohoveti-glazú*, the same.
26. *Aquaí*, a large tree which produces an excellent fruit and whose timber is employed for various purposes.
27. *Ibará-ró*. This tree likewise produces fruit and finds a general use for furniture and carpentry work.
28. *Granadilla quazú* bears a fruit, but its timber is little used.
29. *Tataré*, a tree of ordinary size; its bark is used for dyeing purposes and its timber for all kinds of carpentry work, having a beautiful grain which takes a fine polish.
30. *Corupicay*, large and resinous; makes beautiful furniture.
31. *Tembetary-negro*, a large tree with dark wood which is handsomely veined; used for furniture.
32. *Ingá-blanco*, also used for furniture.
33. *Petereby*, a large tree with wide-spreading branches, producing a heavy timber, which is used in constructions and building.
34. *Aratren-quazú*, ordinary size and bears a pleasant fruit; not much used.
35. *Ibirayú-quazú*, a very large tree, whose timbers are much used for heavy building purposes.
36. *Yagua-ratay*, of little use, though a hard, compact wood.
37. *Taperibá*, large and bushy, used also in heavy constructions.
38. *Ibira-pépé*, the same.
39. *Timbaly*, very straight and tall—wood white; used for beams, axletrees, &c.
40. *Naranjo-agrio*. This is the bitter-orange tree; heavy, and used for cabinet work.
41. *Tembetery-blanco*, large, with very light wood of a white color; not much used.
42. *Cupay*, very large proportions; the wood exceedingly fragrant, richly veined, and used for cabinet work.
43. *Parapary*, large tree, producing a very fine-grained wood, which takes a beautiful polish; used in all kinds of carpentry work.
44. *Nandapá-mi*, very similar to the above.
45. *Guiray*, the same.
46. *Urundey-mi*, a very large tree, close grained, which polishes well; used for cabinet work and other purposes.
47. *Guiavi-saise*, a large tree, which works easily and is used for many purposes.
48. *Curupay-raú*, moderate size; wood used for cabinet work.
49. *Ibyra-pita*, a very large tree, whose timber is valuable and used for building purposes.
50. *Ibirayu-grande* grows to a great height, and is used for cabinet work.
51. *Incierso-amarillo*, a tree of great proportions, which serves for the manufacture of furniture and railway carriages.

52. *Urundey-pará*, a large tree, greatly admired for the beautiful veins of its wood, used for fine cabinet work and also for wood engraving on account of its hardness and fineness of grain.
52. *Taperiba-guazú*, a tree of immense proportions, and whose lumber is used for building and other purposes.
54. *Guayaybi-blanco*, not of very large size, but its wood is very flexible; useful in carpentry work.
55. *Ibyra-ró*, rather a large tree, in general use for various constructions.
56. *Laurel-negro*, also a large tree, whose timber is beautifully veined, the wood being almost black; used for fine cabinet work.
57. *Tatané*, a large tree, whose bark is used for coloring, and whose wood is much esteemed in carpentry work.
58. *Iba-poroiti*, a tree which bears a delicious fruit, and whose wood, very fine grained, is used for cabinet work.
59. *Iba-hai*, very similar to the above; its wood is used for inlaid or mosaic work.
60. *Caahobety-colorado*, very tall and slender, whose wood is used for beams, axletrees, &c.
61. *Ibyra-hobi*, also a tall, slender tree, and used for like purposes as the preceding.
62. *Curupay-hu*, a large tree, whose timber is used for furniture and other things.
63. *Campeche*, of large size, and very dark-colored wood, which takes a fine polish, and is used for cabinet and other work.
64. *Palo de lanza*, of ordinary size, but possesses a very fine wood, and is used for finest cabinet work.
65. *Palo-rosa-colorado*, the darkest colored rosewood; used for veneering and finest grades of furniture.
66. *Timbo-colorado*, a large tree, easily worked; wood used for making wagons and railway cars.
67. *Guayaibi-blanco*, a tree of ordinary size; used for furniture, &c.
68. *Guayacan*, rather a small tree, but its wood is extremely hard, and used for many purposes.
69. *Tatayiba*, a very large tree with beautiful dark wood, which is used for furniture, cabinet work, &c.
70. *Palo Tanto*, of ordinary size; used for various purposes.
71. *Iba pobo*, a large tree which is much used for elegant cabinet work, owing to its beautiful veins.

The uncivilized names of the most of these trees may not be very attractive reading, but it is almost awe-inspiring to wander through the immense primeval forests in which these arboreal monarchs stand, as solemn witnesses of the centuries which have passed since they began their growth.*

The valuable timber which they represent is almost too remote from market to be available yet; but one is impressed with the bountiful provision which nature has made for the future wants of mankind.

Those districts of the Misiones which border on the Upper Paraná River are, in some places, especially distinguished by extensive forests of *caoba*, the celebrated mahogany tree of commerce, as also the rosewood (*palo de rosa*), so generally used for veneering, though there are many other trees which take an equal polish and are fully as handsomely veined. There are two species of the rosewood tree, known in the country as the male and female. The wood of the first is the hardest and most difficult to polish, and has no veins; while that of the other is much softer, is of rather a more pronounced red color, with very dark veins, and furnishes to the cabinet-maker a most esteemed material. The tree is of great circumference, and its specific gravity is 0.700.

---

* Speaking of the arborescence of the Misiones, Mr. White, in his Note-book of a Naturalist, says: "Although I had been accustomed to the vast and imposing forests of Salta, Jujuy, and especially Oran, this region struck me as even more luxuriant, not in such arboreal magnificence, but in universal density and impenetrability; indeed, the exuberance of timber is such that the very names of the trees are as yet unknown to Europeans and even the majority of those with which they have become familiar are only recognized by their Indian vocables. (Vol. II, p. 421.)

The cedar of the Misiones is principally found in that portion bordering on Corrientes. There are three varieties, distinguished from each other by the color of the wood, but all equally adapted to the purposes of commerce. Specific gravity, 0.572.

The pine of the Misiones is generally found in immense forests by itself. It, however, like many of the other valuable woods of this region, hardly yet enters into commerce, notwithstanding the excellence of its timber, for the reason that more accessible forests offer other woods as an abundant compensation. Specific gravity, 0.410.

In the forests of Paraguay and Misiones is also to be seen the famous evergreen tree (*Ilex paraguayensis*), which produces the yerba-mate, the universal beverage of the natives, and the export duty on which, in great part, affords the national revenue of Paraguay, the Government having the exclusive monopoly of the trade.

In these magnificent forests are also to be found orange and pineapple groves, as likewise almost every other variety of tree and shrub bearing the delicious fruits of the tropics. I am told that the orange is not indigenous to these regions, but was introduced shortly after the Spanish conquest, by the Jesuits, who, until their expulsion by order of Philip II, occupied all this portion of the country. The tree is now, however, universally distributed. Some of the orange groves I have visited in the neighborhood of Villa Occidental, Gran Chaco, and near Asuncion, Paraguay, were indescribably beautiful, the enormous trees being bowed down by the weight of their delicious golden produce, while the ground beneath was covered with the fallen fruit. In the season, the oranges are sent by boat,load to Buenos Ayres and Montevideo. They are also used for distillation, and for feeding pigs and cattle, besides being largely consumed by the natives. Owing to the enormous quantities produced, they have, however, but little money value in Paraguay, and over in Buenos Ayres, a distance of over a thousand miles, I have seen them sometimes sold for about 50 cents a bushel.

THE FUTURE OF THE TIMBER TRADE OF THE ARGENTINE REPUBLIC.

I have thus completed a cursory note, which I believe to be reliable, of the several arboreal formations into which the Argentine Republic, with its immense extent from north to south, is naturally divided, beginning with the antarctic forests of beech which occupy the greater part of Terra del Fuego and the lands adjacent to the Straits of Magellan; noting the vast pineries, as yet wholly undeveloped, which skirt the entire eastern slopes of the Patagonian Andes; following these to where the "Monte" formation marks the development of the hard woods; describing the principal trees of the great subtropical forests of Tucuman, Salta, and Oran; glancing at the wealth of timber which literally covers the immense unexplored regions of northern and southern "Chaco," and finally passing in review the marvelous variety of valuable woods which are found in the thousand miles of territory which lies between the Paraná and Uruguay Rivers, called the Mesopotamia of the Argentine Republic. The sketch or compilation is not intended as exhaustive of the subject. It could be very greatly extended, though there are still vast, outlying regions of forests about which little, if anything, is yet definitely known. The report, however, is sufficient to explode the generally prevailing idea that the Argentine Republic is is entirely a pampa or prairie country and lacking in timber resources, an impression which has gained credence from the fact that the province of Buenos Ayres, which abroad is generally taken for the whole country, is to a great extent destitute of trees; and by the further fact, which seems to be an anomaly, that a very large part of the lumber used here is still imported from the United States.

In spite of this, however, as I have shown, the greater portion of all the northern and northwestern provinces is occupied by forests of timber, which not only in their enduring qualities but in their fineness of fiber, smoothness, and beauty of coloring will compare favorably with those of any country in the world. Indeed, in their susceptibility to the highest degrees of polish, and in the striking varieties and combinations of their tints, it is doubtful if any other country has woods that fully equal them. As I have said, the full extent of this arboreal wealth is not yet known, and we must still wait for a scientific description of a very large proportion of the country which contains these marvelous timber resources. It is evident, however, that, in the more or less remote future, when the increasing population of the Argentine Republic has come face to face with these outlying virgin forests, and railways and a more extensive system of river navigation place a greater commercial value upon the work of the wood chopper and the lumberman, the markets of the world, which are just now beginning to realize the undeveloped wealth which these forests represent, will be astonished at the amount of precious woods and valuable timber, suitable for every variety of work, which this country will be able to supply. Europe is now driving the entering wedge in the mammoth timber trees which skirt the shores of the Upper Paraná, and the ship-loads which in the last few years have gone forward to the cabinet and fine-furniture manufactories of France and Germany, have so greatly exceeded the expectations as to their value as to make them more anxious for greater supplies. Indeed, it will not be surprising if the tables will yet be turned, and even the United States, after having quite exhausted her own forests in supplying the foreign demand, will, in time, be compelled to look to the Argentine Republic for a considerable portion of its lumber.

E. L. BAKER,
Consul.

UNITED STATES CONSULATE,
Buenos Ayres, June 20, 1883.

EUROPEANS ON THE CONGO.

REPORT BY CONSUL DU VERGE.

I have the honor of informing the Department that Loango and Pontanegra, north of the Congo, are now occupied by the French, who have planted their flag and landed some troops for its protection.

The Portuguese Government has already established a sanitary station on the Island of Banana, and a post-office, and will, in a few days, with the protection of two English gunboats, establish there a custom-house.

One of Stanley's lieutenants, with about fifty Zanzibarians, pulled down the Dutch flag from an old house established years ago at the mouth of the Quilto River. It can be very fairly predicted from the paralyzed state of trade and the excited state of the inhabitants that the whole southwest coast of Africa is at the present moment on the eve of great trouble and important developments.

The heavy rains that we have had very lately did great damage throughout all the settlements, and the fevers and sickness indigenous to this coast are now in their full element, being always much more violent and dangerous to new-comers than to those already acclimated.

A new Belgian company has opened trade with this province, opening factories at Ambriz, Ambrizette, and Kingsembo, and the interior.

The negro or slave traffic in this province still continues in full force, as I have already mentioned. The gentleman in whose house I now reside, by the advice or order of my medical advisor, and to which I have removed my office, bought two young negroes yesterday, and then obtained from the Government a supposed contract for service for five years; but this "after having paid in value" the amount required by the slave merchant. But I learn that these purchases are quite common and frequent in the city, while throughout the interior the barter is effected as of old, without even the semblance of a contract being made.

L. DE R. DU VERGE,
Consul.

UNITED STATES CONSULATE,
St. Paul de Loando, April 15, 1883.

NOTES.

Trade of Lyons with the United States.—According to statistics supplied by Consul Peixotto, the declared exports from the consular district of Lyons to the United States for the first six months of the present year amount to $5,322,851.20. For the corresponding six months of 1882 they amounted to $6,452,313.58, a decrease for this year of $1,329,462.38. This decrease has been principally in the export of silk manufactures, the diminution in the export of these goods alone amounting to nearly a million dollars. There was also a very sensible falling off in the exports of raw silk and of waste silk, and a slight decrease in dye-stuffs, iron manufactures, argals, macaroni, optical goods, &c. An increase occurred in the following articles: Organzine silk, leather and skins, wines and liquors, pierced cocoons, weaving materials, wooden pipes, &c.

The silk goods trade of France.—Under date of July, 1883, Consu Peixotto, of Lyons, reports that the official figures of the French Government for the first five months of the year show a very considerable decrease in the exports of silk goods and waste silk, viz, of over $3,000,000. The exports of these goods to all countries in 1882 (*i. e.*, from January 1 to May 31) amounted in round figures to $26,454,000; for the same period this year to $23,454,000; decrease, $3,000,000. Fully one-third of this decline in the export of French silks must be attributed to the United States.

Foreign trade of Japan.—According to official returns transmitted to the Department by Minister Bingham, the foreign trade of Japan for the month of July, 1883, was as follows: Commodities exported, 2,664,480 yen; commodities imported, 2,773,281 yen; the imports being in excess of the exports 108,801 yen. Specie and bullion exported during the month, 117,073 yen; import thereof, 928,620 yen.

Export duty on Brazilian coffee.—Minister Osborn, under date of August 16, 1883, furnishes the following information:

> On May 1, 1872, the rate of export duty on coffee, as fixed by the Imperial Government, was 9 per cent. ad valorem. This rate was established by act of September 26, 1867, and so remained until the 30th of October last, when it was reduced by Parliament to 7 per cent., at which figure it now stands. An additional export duty of 4 per cent. is collected by the province in which the coffee is grown. This rate prevailed May 1, 1872, and has continued unchanged.

Austrian consular reports.—Consul General Weaver, in forwarding to the Department copies of *Die Kammer* (a commercial weekly recently started in Vienna, under the supervision of the secretaries of the commercial chambers of Reichenberg, Brünn, Budapesth, and Vienna), accompanied by supplements entitled "Der Consul," made up mainly of reports of Austro-Hungarian consuls in foreign countries, says:

> There can be but little doubt that the publication of the reports of consuls in their present form has been in a large part the actuating motive to this enterprise, for it should be understood that these commercial chambers stand in close official relation to the Government of this country, and the complimentary notices of our Consular Monthly by journals and publicists have demonstrated the need of something of the same character for the diffusion of the commercial information brought together in the reports of the Austro-Hungarian consular officers.

Navigation at Bordeaux.—Consul Roosevelt has prepared the following statement showing the navigation at the port of Bordeaux for the months of June and July, 1883:

FOR THE MONTH OF JUNE.

Flag.	ENTERED.						CLEARED.					
	Steamers.		Sailing vessels.		Total.		Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
United States												
Austria			3	1,824	3	1,824	1	816	8	4,274	9	5,090
Belgium	2	1,038			2	1,038	3	1,605			3	1,605
Denmark	3	2,238	2	305	5	2,543	3	2,510	1	195	4	2,705
England	50	27,831			50	27,831	53	28,502	1	168	54	28,670
France	64	29,638	70	10,563	134	40,201	62	29,863	74	10,302	136	40,165
Germany			21	9,921	21	9,921			16	6,933	16	6,933
Holland	5	2,388			5	2,388	5	2,388	3	1,025	8	3,413
Italy	1	332	5	2,680	6	3,012			2	1,368	2	1,368
Norway			5	1,517	5	1,517			2	429	2	429
Portugal												
Russia			2	1,005	2	1,005			1	269	1	269
Spain	1	132	1	148	2	280	1	132			1	132
Sweden	4	1,870			4	1,870	5	2,328			5	2,328
Totals	130	65,467	109	27,963	239	93,430	133	68,144	108	24,963	241	93,107

FOR THE MONTH OF JULY.

Flag.	ENTERED.						CLEARED.					
	Steamers.		Sailing vessels.		Total.		Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
United States												
Austria			2	1,067	2	1,067			4	1,967	4	1,967
Belgium	2	1,134			2	1,134	2	1,065			2	1,065
Denmark			3	536	3	536			2	469	2	469
England	71	42,737	3	1,037	74	43,774	63	38,163			63	38,163
France	65	32,137	75	10,413	140	42,550	68	31,727	79	13,795	147	45,522
Germany			4	1,443	4	1,443			7	3,361	7	3,361
Holland	5	2,277	1	253	6	2,530	4	1,840			4	1,840
Italy			6	3,054	6	3,054			7	3,782	7	3,782
Norway	1	386	16	7,022	17	7,408	1	386	8	3,412	9	3,798
Portugal												
Russia			5	2,239	5	2,239			2	1,103	2	1,103
Spain	4	935			4	935	3	306	1	636	4	942
Sweden	5	2,467	5	2,829	10	5,296	4	1,964			4	1,964
Totals	153	82,073	120	29,893	273	111,966	145	75,451	110	28,525	255	103,976

Bordeaux exports and navigation.—Under date of September 4, Consul Roosevelt transmits the following statistics concerning the export trade of Bordeaux:

During the first seven months of 1883 the exportation of wines from the department of the Gironde reached 706,000 hectoliters, a quantity inferior to the corresponding period of 1882, which amounted to 776,000 hectoliters, but somewhat in advance of that of 1881, which was 704,000 hectoliters. The principal exportations have been to—

	Hectoliters.
England	129,000
Argentine Republic	126,000
Germany	101,000
United States	59,000
Holland	47,000
Uruguay	45,000
Belgium	39,000
Brazil	17,000
Russia	11,000

As near as I am able to ascertain from the customs statistics, which are not always reliable, the value of exportations thus far this year is about 71,000,000 francs.

There is a considerable increase in the maritime movement of this port, as will be seen by the following table:

ENTERED.

	Tonnage.
1883	659,277
1882	563,000
1881	498,000

CLEARED.

1883	656,502
1882	501,000
1881	459,000

Foreign vessels enjoy the monopoly of the carrying trade, to the disadvantage of the French merchant marine, which has materially decreased this year.

Decrease in Hawaiian exports.—Minister Dagget, of Honolulu, transmits to the Department the following official statement of the principal domestic exports of the Hawaiian Islands for the quarter ending June 30, 1883, including a comparative exhibit of exports of the same quarter for 1882.

The table shows a comparative decrease of 4,835,780 pounds in sugar export, and an increase in molasses, rice, coffee, wool, goat skins, and bananas, making a total decrease in export value of $373,526.93.

A comparative exhibit for the first six months ending June 30, 1882, and June 30, 1883, shows a decrease in export of but 1,897,184 pounds in sugar, and a decrease in values of but $128,011.91.

This decrease in sugar export is attributed by the Pacific Commercial Advertiser to the—

diminution in supply obtained this year from the Kohala district on Hawaii, and from Spreckelsville on Mauai. These districts have markedly fallen off in their product owing, it is said, to an unusually dry season; but it is anticipated that the present falling off will be fully made up in the coming crops.

***Table of principal domestic exports, Hawaiian Islands, second quarter,* 1883, *as compared with second quarter,* 1882; *also for six months,* 1883, *as compared with six months,* 1882.**

Period.	Sugar.	Molasses.	Paddy.	Rice.	Coffee.	Poi.	Fungus.	Bananas.
	Lbs.	*Galls.*	*Lbs.*	*Lbs.*	*Lbs.*	*Bbls.*	*Lbs.*	*Bchs.*
Second quarter, Honolulu, 1883	41,152,618	45,078	104,936	3,308,800	7,300	......	1,250	29,475
Second quarter, Kahului, 1883	7,518,195	......	......	......	......	......	......	......
Second quarter, Hilo, 1883	478,928	5,580	......	......	......	......	......	......
Total second quarter, Hawaiian Islands, 1883	49,149,741	50,658	104,936	3,308,800	7,300	......	1,250	29,475
Total second quarter, Hawaiian Islands, 1882	53,985,527	45,632	......	2,648,126	1,298	12	......	7,074
Increase	......	5,026	104,936	660,674	6,002	......	1,250	22,401
Decrease	4,835,786	......	......	......	......	12	......	......
Six months, Honolulu, 1883	69,166,115	82,034	104,936	5,910,800	15,782	......	1,250	38,137
Six months, Kahului, 1883	10,083,265	......	......	......	......	......	......	......
Six months, Hilo, 1883	1,436,350	9,900	......	......	......	......	......	......
Six months, Hawaiian Islands, 1883	80,685,730	91,934	104,936	5,910,800	15,782	......	1,250	38,137
Six months, Hawaiian Islands, 1882	82,582,914	62,268	......	4,755,001	5,805	12	1,328	13,609
Increase	......	29,666	104,936	1,155,799	9,977	......	......	24,528
Decrease	1,897,184	......	......	......	......	12	78	......

	Goat-skins.	Hides.	Tallow.	Wool.	Betel leaves.	Calf-skins.	Sheep-skins.	Value.
	Pcs.	*Pcs.*	*Lbs.*	*Lbs.*	*Bxs.*	*Pcs.*	*Pcs.*	*Dollars.*
Second quarter, Honolulu, 1883	9,710	5,089	7,000	101,195	746	113	1,954	2,767,636 88
Second quarter, Kahului, 1883	......	364	2,750	......	......	......	......	490,477 45
Second quarter, Hilo, 1883	......	271	......	......	......	......	......	34,734 26
Total second quarter, Hawaiian Islands, 1883	9,710	5,724	9,750	101,195	746	113	1,954	3,292,848 59
Total second quarter, Hawaiian Islands, 1882	5,199	5,643	14,149	16,651	47	......	1,680	3,666,375 52
Increase	4,511	81		84,544	699	113	274	......
Decrease	......	......	4,399	......	......	......	......	373,526 93
Six months, Honolulu, 1883	15,374	27,967	14,815	112,238	849	190	4,004	4,721,327 34
Six months, Kahului, 1883	......	962	7,065	......	......	......	......	659,157 15
Six months, Hilo, 1883	......	598	400	......	......	......	......	96,092 56
Six months, Hawaiian Islands, 1883	15,374	29,527	22,280	112,238	849	190	4,004	5,476,577 05
Six months, Hawaiian Islands, 1882	5,749	9,325	21,533	19,509	149	70	......	5,604,588 96
Increase	9,625	20,202	747	92,729	700	120	4,004	......
Decrease	......	......	......	......	......	......	......	128,011 91

E. R. HENDRY,
Deputy Collector of Customs.

COLLECTOR-GENERAL'S OFFICE,
Honolulu, H. I., June 30, 1883.

Affairs at Vancouver.—Under date of August 30, 1883, Consul Francis, of Victoria, submits the following statistics for the quarter ending June 30:

American vessels.—The number of American vessels arriving and departing was 194, tonnage aggregating 73,548, mostly steamers, making daily, weekly, semi-monthly, and monthly trips from and to Port Townsend, San Francisco, and Portland, Oregon.

Wrecks.—There were five wrecks on the coast during the quarter—American barks Gettysburg, Southern Chief, and schooner Phœbe Fay; the Canadian bark Connaught and Australian bark Tiger—all in a southeast gale of wind occurring on the 14th day of April, and with the exception of the Phœbe Fay, which was abandoned at sea, driven upon the shore of Royal Roads, and, found so much damaged, were condemned and sold. The Connaught was comparatively new, and lumber laden; the others old and in ballast. The whole fleet and cargoes were valued at $120,000, upon which it was reported there was $40,000 insurance. The Gettysburg, Southern Chief, and Connaught were gotten off at a heavy expense, the former now being repaired, the others found damaged to such an extent as to be regarded beyond redemption.

Imports.—The value of imports in American vessels during the quarter, as reported at the consulate, were largely in excess of any previous one, the increase being materials and machinery for the construction of the Canadian Pacific Railroad, tin plate, and twine for salmon canneries, and provisions for the employés, in the aggregate amounting to $717,414.10. General merchandise from the United States has varied but little in value and variety, while from Canada it has notably and proportionably increased with the emigration therefrom settling in the province.

Upon the completion of the Northern Pacific Railroad merchants are assuming that goods will be landed there 10 or 15 per cent. below what they are now costing, and that the result will be increased trade between Canada and this province. The fact is that nearly all the goods in demand in this section of country are now being produced in Canada at nearly the same cost as in the United States, though generally of acknowledged inferior materials and workmanship, with the advantage of their not paying duties of 25 or 35 per cent.; consequently importations from the States and foreign countries are gradually lessening.

Exports.—The declared exports from the province to the United States during the quarter, in American and foreign vessels, amounted in the aggregate to $312,967.74—leading articles being coal, 36,840 tons, valued at $140,815.00; gold dust and bullion, $90,555; fur-seal and other furs, $29,729.60; hides, $19,089.16; beef-cattle and fresh beef, $13,592.10. Exports to foreign countries during the same period, coal, furs, lumber, wool, oil, and salmon, are estimated to reach $100,000, thus making the exports fall short of the imports $300,000. Salmon shipments next month are calculated to more than overbalance the account.

Fur-sealers.—Reports from the fur-sealers on the west coast of the island and of Washington Territory, also at the north, are very discouraging—not half a catch, compared with last season, in consequence of rough weather, low prices, and other causes being anticipated.

During the first of the season sudden and violent storms caused great loss of life among the Indians—61 from Vancouver's Island and 16 from Neah Bay, Washington Territory, were reported lost—which so frightened and demoralized the Indians of the whole coast that only a small number would risk themselves beyond the reach of the shore.

Salmon fishery.—Reports from the salmon canneries of the province are showing a very poor business, and unless the run increases and extends into the month of September the put up will fall greatly below that of last season.

Canadian Pacific Railroad.—The business and prosperity of the province appear upon a more settled basis than heretofore. Construction of the Canadian Pacific Railroad is being vigorously pushed forward, employing between 9,000 and 10,000 men, Chinamen constituting two-thirds of the force.

Immigrants from Manitoba and other provinces of the Dominion are coming and making permanent homes on the island and mainland.

Progress of the province.—The city of Victoria is improving; a number of substantial buildings are being erected; towns and centers, a long time lying dormant on the mainland, are being filled up with settlers; new coal mines are being opened; the construction of the island railroad has been secured; the completion of the dry-dock, having been placed in the hands of the Dominion Government, is no longer a matter of doubt; assurances of stability in the present Dominion tariff is stimulating the establishment and enlargement of manufactories; farm products are being produced more abundantly and the province is becoming less dependent upon neighboring States and territory; daily communication by steamers has been established with ports on Puget Sound, and weekly with San Francisco; in short, indubitable evidences are presenting themselves that the Province of British Columbia, so long slumbering and unappreciated as to its resources, has now taken a start, and is destined, without some unforeseen reverses, to go steadily on progressing.

INDEX.

A.

Page.

Adulteration of Persian opium 765

Agricultural productions of Russia 732–750

American cotton in Saltillo preferred to Mexican 630

food supplies for Canton, how to increase the same 676, 677

goods in Germany, opposition to, and how to overcome the same; imitated by German manufacturers; how to pack for the German market 615, 616

manufactures and products in Canton; cottons, 675; ginseng, clocks, kerosene oil, and food supplies, 676; wines and liquors... 677

navigation between Southern Asia and the United States 641–650

salmon in New Zealand 817

seamen, discharge of, in foreign ports 649

trade and navigation in Zanzibar 626–628

with the South Sea Islands 778–780

at Vancouver 872

vs. Swiss silks 770

watches 773-776

Argentine Republic, woods of 849–866

(Botany of the country, 849; Terra del Fuego and adjacent islands, 850; forests north of the Straits of Magellan and eastern slope of the Southern Andes, 851; treeless regions of the Pampas, 852; trees of the eastern slopes of the Andes, 853; giant cacti forests, 854; the great subtropical forests, 855; timber resources of the Gran Chaco, 859; forests of the Argentine Mesopotamia, 861; trees of the Missiones and Paraguay, 862; future of the timber trade of the Argentine Republic, 865.)

Art in the fifteenth and sixteenth centuries 725

schools in Munich 725–727

Austrian consular reports 868

B.

Banks, postal savings, of England 750–759

Brazilian coffee, export duty on 868

sugar factories 780–785

Bordeaux, navigation at 869–870

exports of. 870

British ship-building during the first half of 1883 621–625

British Columbia. (See Vancouver.)

Butter, Danish, its formation and physical and chemical compositions. 787–802

C.

Canadian tariff, changes in 632–641

Canton, trade and commerce of 671–678

(Commercial features of, 672; river steamers and pirates, 673; foreigners engaged in trade, 673; tonnage of shipping engaged in trade of, 674; passenger traffic; imports and exports of, 674; cotton, woolen, and other imports into, 675; kerosene oil trade, injury inflicted on; American food imports into, 676.)

Page.
China, maritime customs department of 672
opium consumption in, and its effects 720-722
railroads, mines, telephones, and telegraphs in 825-829
Climate of Saltillo 628, 629
Clocks, American, in Canton 676
Coffee, Brazilian, export duty on 862
exports of from Santos, 1874-1883 .... 666, 667
exports from Rio de Janeiro 653-656
planters and plantations in Brazil 664-671
Colombia, U. S. of, labor in 678-688
Colonization in Tuxpan 718
Commerce of Santos 662-671
Congo, Europeans on the 867
Consular reports, Austrian 866
Corea, its people, trade, and industries 616-620
Cotton and cotton manufacture in Saltillo 630
manufactures, American *vs.* European, in the South Sea Islands 779
Crops, grain, principal countries 745
Russia, from 1870 to 1879 741-744
Customs department of China 672

D.

Dairy thrift in Denmark (formation of butter and its physical and chemical composition) 787-802
Denmark, dairy thrift in (formation of butter and its physical and chemical composition) 787-802
Duty exports on Brazilian coffee 862

E.

Embroideries, Swiss, industry 776
England, postal savings bank system of 750-759
Europeans on the Congo 867
Exhibition, Swiss, held at Zurich 772-778
Exports of Bordeaux 870
of Canton—silk, tea, and miscellaneous 677-678
of coffee at Rio de Janeiro 653-656
of grain from Russia 745-748
of Hawaii, decrease of 870-871
of New Zealand fish 817
of Samoa to San Francisco 780
of Swiss embroidery to the United States, 1866-1882 776
of silk from Persia 765
of Swiss silk to the United States, 1871-1882 762
Financial statistics of New Zealand 818-825
Fisheries, Irish (for particulars see "Irish fisheries") 802-811
New Zealand (for particulars see "New Zealand fisheries") 812-815
Foreigners engaged in trade in Canton 673
in Mexico, rights of 698-714
Forests of the Argentine Republic (for particulars see "Argentine Republic, woods of.")
France, silk goods trade of 866
French money, weights, and measures, reduced to American equivalents 829-842
watch trade and manufacture 771

G.

Page.

Germany, opposition to and imitations of American manufactures in; how to pack goods for the German markets 615–616
Grain crops of Russia from 1870 to 1879 741–744
    exports of Russia 745–748
    production in European Russia 736–741
    yield of the principal countries 745

H.

Hawaiian exports, decrease of 870–871
    sugars 785–787

I.

Imports at Canton: Cotton and woolen goods 675; metals and miscellaneous goods, kerosene oil, and American food supplies, 676, 677; American wines and liquors, 677.)
    at Saltillo 630
    at Rio de Janeiro, by articles 657
Industries of Switzerland, number of persons employed in, and their employment, during the year 1882 729–731
Irish fisheries 802–811
    (Irish fishermen and decline of the Irish fisheries, 803; oyster and herring fisheries, 804; mackerel fisheries, 805; pilchards, fishery piers, and harbors, 806; cost of carriage; the Government and Irish fisheries, 807; discouragement of Irish fishermen, 808; Irish fishery reports, 809–811; exports of fish from Ireland, 811, 812.)
Italy, foreign patent medicines and pharmaceutical preparations in 722–724

J.

Japan, foreign trade of 86

K.

Kerosene oil trade in Canton 676

L.

Labor in Colombia 678–688
Lyons, trade of, with the United States 868

M.

Measures and weights, metric, reduced to American equivalents 829–848
Medicines, foreign, patent and pharmaceutical, in Italy 722–724
Metric system reduced to American equivalents 829–848
Mexico, rights of foreigners in 688–744
Mining in Coahuila 631
Mines and railroads of China 825–829
Munich art schools 725–727

N.

Navigation, America, between Southern Asia and the United States 641–650
    at Bordeaux 869, 870
    ocean and river, at Canton 674
    at Samoa 780

Page

New Zealand, financial statistics of 818-822
fisheries 812-817
(Whales, seals, and ribbon fish, 812; sharks and swordfish, 813; the dugong of Queensland, 814; edible fishes of New Zealand, 815; American salmon in New Zealand; exports of New Zealand fish, 817.)

O.

Opium consumption in China and its effects 730-732
Opium, Persian, adulteration of 765

P.

Packing goods for the German market 616
Persia, silk culture in 759-765
Postal savings-bank system of England 750-759
Prices in Saltillo 631
Patent medicines, foreign, in Italy 722-724
Pharmaceutical preparations, foreign, in Italy 722-724
Phylloxera in France, to eradicate 724
Pork, American *vs.* Hungarian, in Germany 651

Q.

Quanza, the, trade and customs on 651-653

R.

Railroads and mines in China 825-829
Rio de Janeiro; exports and imports of 653
River Quanza, trade and customs on 651-653
Roumania, free ports in 725
Russia, agricultural products of 732-749
(Cultivated land and its proprietorship, 732-734; conditions and forms of agriculture, 734-736; grain productions, 736-741; grain crops for 1870 to 1879, 741-744; grain yield of leading countries, 745; grain export of Russia, 745-748; agriculture in Asiatic Russia, 748, 749.)

S.

Salmon, American, in New Zealand 817
Saltillo, its climate, health, improvements, manufactures, commerce, taxes, mines, and cost of living 628-631
Samoa. (See South Sea Islands.)
Santos, commerce and navigation of 668-671
Schools, art, in Munich 725-727
Seamen, American, discharge of, in foreign ports 648
Ship-building in England during the first half of 1883 621-625
Silk culture in Persia 759-765
in Syria 766, 765
goods trade of France, 1883 .... [illegible]
industry of Switzerland at the Zurich exhibition 767-771
Silks, American *vs.* Swiss 774
South Sea Islands, American trade with 775-779
Stoves, American, in Germany 618
Sugar factories in Brazil 780-785
Sugars of Hawaii 785-787

Page.
Swiss embroidery industry 776
industries, number of persons employed in, and their employments, during the year 1882 729–731
machinery and manufactures, as seen at the Zurich exhibition 777
Switzerland, silk industry of, at the Zurich exhibition 767–771
Syria, silk culture in 766–767

T.

Tariff, Canadian, changes in 632–641
Taxes in Saltillo 631
Telegraphs and telephones in China 829
Telephones and telegraphs in China 829
Trade and customs on the river Quanza 651-653
foreign, of Japan 868
of Lyons with the United States 868
and products of Tuxpan 715–720
of Rio de Janeiro 653
silk goods, of France 868
of Zanzibar 626–628
Tuxpan, trade and products of 715–720
(Land and products, 715; lighterage and the bar, 716; port of, 715; colonization and immigration, 718, 719; exports to the United States, 720.)

V.

Vancouver, affairs at 872
(American vessels, wrecks, imports, exports, fur-sealers, salmon fishery, Canadian Pacific Railroad, immigrants, progress of the province.)

W.

Watch trade and manufacture of France 771
Weights and measures, metric, reduced to American equivalents 829–848
Wines and liquors, American, for Canton 677
Woods of the Argentine Republic (for particulars see "Argentine Republic, woods of") 849–866

Z.

Zanzibar, European and American trade in 626–628

UNITED STATES CONSULAR REPORTS.

DECLARED EXPORTS

FOR

THE UNITED STATES.

FIRST AND SECOND QUARTERS, 1883.

TATEMENTS SHOWING THE NATURE AND VALUE OF THE EXPORTS
DECLARED FOR THE UNITED STATES IN THE CONSULATES AND
COMMERCIAL AND CONSULAR AGENCIES OF THE UNITED
STATES IN THE SEVERAL COUNTRIES, FOR THE FIRST
AND SECOND QUARTERS OF THE YEAR 1883.

PUBLISHED BY THE DEPARTMENT OF STATE, ACCORDING TO
ACT OF CONGRESS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

CONTENTS.

EXPORTS DECLARED IN AFRICA.

(In two divisions, Northern and Southern.)

NORTHERN DIVISION.

(Beginning at the Canary Islands and ending at the Gulf of Aden, the northern division of Africa embraces Morocco, Algeria, Tunis, Tripoli, and Egypt.)

Page.

Canary Islands:
  Teneriffe.................... 3
  Palma.................... 3
Madeira:
  Funchal.................... 4
Algeria:
  Algiers and Oran.................... 4
Morocco, Tunis, and Tripoli.................... 4
Egypt:
  Cairo.................... 4

SOUTHERN DIVISION.

(The southern division of the continent of Africa may be defined as follows: From Cape Verde on the west coast around by the Cape of Good Hope and down the east coast to Cape Guardafui.)

Cape Verde Islands:
  Santiago.................... 5
Sierra Leone.................... 5, 6
Gaboon.................... 6
St. Paul de Loando.................... 6
Cape Colony:
  Cape Town.................... 6
  Port Elizabeth.................... 7
Zanzibar.................... 7, 8
Madagascar:
  Tamatave.................... 8
  Majunga.................... 8
Mauritius:
  Port Louis.................... 8

EXPORTS DECLARED IN AMERICA.

Page

Dominion of Canada:

Province of Ontario:

Amherstburg 9
Belleville 10
Chatham 10, 11
Wallaceburg 11
Clifton 11
Coaticook 12
Collingwood 13
Orillia 13
Owen Sound 14
Sault Ste. Marie 14
Fort Erie 14
Goderich 15
Stratford 15
Guelph 16
Hamilton 16, 17
Paris 17
Kingston 17, 18
Deseronto 18
Gananoque 19
Napanee 19, 20
Picton 20
Morrisburg 20
Cornwall 21
Ottawa 21, 22
Grenville 22
Port Hope 22
Port Rowan 23
Port Sarnia 23
London 23
Port Stanley and Saint Thomas 24
Courtwright 24
Prescott 25
Brockville 25, 26
Sherbrooke 26, 27
Toronto 27, 28
Windsor 28, 29

Province of Quebec:

Montreal 29
Saint Hyacinthe 29, 30
Saint John's 30
Farnham 31
Sorel 31
Stanbridge 31, 32
Three Rivers 32

Province of Nova Scotia:

Halifax 33
Pictou 33
Cape Canso 33
Cow Bay 34

Page.
Dominion of Canada—Continued.
Province of Nova Scotia:
Glace Bay 34
Guysborough 34
Lingan 34
Louisburg 34
North Sydney 34
Port Hastings 34
Port Sydney 34
Windsor 35
Province of New Brunswick:
Saint John 35
Fredericton 36
Grand Manan 36
McAdam Junction 36
Newcastle 36
Saint Andrews 36
Saint Stephen 36
Province of Manitoba:
Winnipeg 37
Emerson 37
Mexico:
Acapulco 38
Tehuantepec 38
Chihuahua 39
Guaymas 39
Guerrero 39
La Paz 39
Mazatlan 40
Monterey 40
Nuevo Laredo 40
Piedras Negras 41
Saltillo 41
Tampico 41
Tuxpan 42
Vera Cruz 42, 43
Frontera 43
Central America:
Guatemala:
Guatemala 43, 44
Champerico 44
Livingston 44
San José de Guatemala 45
Honduras:
Ruatan and Truxillo 45
British Honduras:
Belize 46
Salvador:
La Union 46
South America:
United States of Colombia:
Barranquilla 47
Rio Hacha 47
Colon 48
Panama 48

Page

South America—Continued.

Venezuela:

Laguayra 48
Maracaibo 49
Coro 49
Puerto Cabello 50

Dutch Guiana:

Paramaribo 50

British Guiana:

Demerara 51

Brazil:

Bahia 51
Para 51
Pernambuco 52
Rio de Janerio 52
Rio Grande do Sul 52, 53, 54
Santos 54

Uruguay:

Montevideo 54

Argentine Republic:

Buenos Ayres 54, 55
Rosario 55

Peru:

Callao 55
Lambayeque 55
Iquique 56

Ecuador:

Guayaquil 56

The West Indies:

British West Indies:

The Bahamas:

Nassau 56
Dunmore Town 57
Governor's Harbor 57
Green Turtle Cay 57
Mathewtown 58, 60

Bermuda:

Hamilton 58
Antigua 58, 59
Anguilla 59
Dominica 59
Montserrat 59
Nevis 59, 60

Barbadoes:

Barbadoes 60

Jamaica:

Kingston 60, 61, 62
Trinidad 62

Turk's Island:

Turk's Island 62, 63
Cockburn Harbor 63
Salt Cay 63

French West Indies:

Guadelaupe 63
Martinique 64

Page.
The West Indies—Continued.
Danish West Indies:
St. Thomas 64
Dutch West Indies:
Curacao 64, 65
Bonaire 65
Spanish West Indies:
Cuba:
Baracoa 65
Cardenas 65
Cienfuegos 66
Matanzas 66
Sagua la Grande 67
San Juan de los Remedios 67
Santiago de Cuba 67
Trinidad de Cuba 68
Porto Rico:
Mayaguez 68
Ponce 68, 69
San Juan 69
Aguadilla 69
Arecibo 69, 70
Guayama 70
Naguabo, Humacao, and Fajardo 70
Viequez 70
Hayti:
Cape Haytien 70, 71
Gonaives 71
Port de Paix 71
Port au Prince 71, 72
San Domingo:
Puerto Plata 72
Samana 72, 73
Macoris 73
San Domingo 73
Azua 74

EXPORTS DECLARED IN ASIA.

Asiatic Turkey:
Asia Minor:
Smyrna 75
Syria:
Beirut 76
Aden 76
British India:
Calcutta 77
Ceylon 78
Straits Settlements:
Singapore 78, 79
Penang 79
Dutch India:
Batavia 80
Padang 80

Page.

Philippine Islands:

Manila 80, 81
Cebu 81

Japan:

Kanagawa 81
Nagasaki 82
Osaka and Hiogo 82

Siam:

Bangkok 82

China:

Amoy 82, 83
Canton 83
Foo-Chow 83
Hankow 83
Ningpo 84
Shanghai 84
Tien-Tsin 84
Chefoo 85
Hong-Kong 85, 86

EXPORTS DECLARED IN AUSTRALASIA.

Australia:

Victoria:

Melbourne 86

New South Wales:

Sydney 86, 87
Newcastle 87

Tasmania:

Hobart 88

New Zealand:

Christ Church 88
Dunedin 88

EXPORTS DECLARED IN EUROPE.

Russia:

Moscow 89
Odessa 89
St. Petersburg 89, 90
Riga 90
Warsaw 90

Sweden and Norway:

Sweden:

Gottenburg 90
Stockholm 91

Norway:

Bergen 91, 92
Christiania 92

Germany:

Aix la Chapelle 92
Barmen 93

Page.

Germany—Continued.

Cologne 93
Dusseldorf 94
Elberfield 94
Frankfort-on-the-Main 94, 95
Kehl 96
Mannheim 96, 97
Mayence 97
Munich 98
Nuremberg 98
Sonneberg 99
Recapitulation of foregoing 100–102
Annaberg 103
Berlin 103–105
Bremen 105
Bremerhaven-Geestemunde 105, 106
Breslau 106
Brunswick 107
Chemnitz 107, 108
Glauchau 108
Crefeld 109
Dresden 109, 110
Hamburg 110
Altona 111
Kiel 111
Lubeck 111
Leipsic 111, 112
Gera 112
Stettin 113
Dantzic 113
Konigsberg 113, 114

The Netherlands:

Amsterdam 114
Rotterdam 115

Belgium:

Antwerp 115, 116
Brussels 116, 117
Charleroi 117
Ghent 118
Ostend 118

The United Kingdom:

England:

Birmingham 118–120
Bradford 120, 121
Bristol 121
Falmouth 121
Gloucester 122
Hull 122
Leeds 123, 124
Huddersfield 124
Liverpool 124–126
London 126, 127
Manchester 127
Newcastle-upon-Tyne 127, 128

Page

The United Kingdom—Continued.

England:

Carlisle 128

Old Hartlepool 128, 129

Sunderland 128

Nottingham 129

Plymouth 130

Sheffield 130, 131

Southampton 131

Tunstall 132

Ireland:

Cork 132

Londonderry 132

Scotland:

Dundee 133

Aberdeen 134

Dunfermline 134

Glasgow 134, 135

Leith 135, 136

Galashiels 136

Wales:

Cardiff 137

Llanelly 137

Newport 137

Swansea 138

France:

Bordeaux 138, 139

Havre 139, 140

La Rochelle 140

Marseilles 140, 141

Nantes 142

Nice 142

Cannes 143

Paris 143, 144

Rheims 144, 145

Rouen 145

St. Etienne 146

Switzerland:

Basle 146

Berne 147

Geneva 147

Horgen 147, 148

St. Galle 148

Zurich 148, 149

Gibraltar 149

Spain:

Barcelona 149

Cadiz 150

Malaga 150, 151

Santander 151

Portugal:

Lisbon 151

The Azores 152

Page.

Italy:

Castelamare 152
Florence 152, 153
Cagliari 153
Genoa 153, 154
Leghorn 154, 155
Bologna 155
Carrara 155
Messina 156
Milan 156, 157
Naples 157
Palermo 157, 158
Carini 158
Girgenti 158
Licata 158
Marsala 159
Trapani 159
Rome 159
Ancona 160
Venice 160
Austria-Hungary 161, 162

Turkey:

Constantinople 162

Greece:

Patras 163
Zante 163

Polynesia:

Hawaiian Islands:

Honolulu 163
Kahului 164

Society Islands:

Tahiti 164

EXPORTS DECLARED IN AFRICA.

(In two divisions, Northern and Southern.)

NORTHERN DIVISION.

(Beginning at the Canary Islands and ending at the Gulf of Aden, the northern division of Africa embraces Morocco, Algeria, Tunis, Tripoli, and Egypt.)

CANARY ISLANDS.

TENERIFFE AND AGENCIES.

(Agencies: Lanzarotte, Grand Canary, Orotava, Palma.)

TENERIFFE.

Quarter ending March 31.

Cochineal, 144,895 pounds	$30,098 19

Quarter ending June 30.

Cochineal, 32,014 pounds	$8,519 04
Wine, 2,531 gallons	1,141 25
Rags, 7,429 pounds	109 25
Bones, 13,853 pounds	103 18
Onions, 90,088 pounds	918 03
Potatoes, 94,000 pounds	940 00
Total	11,730 75

HUGH H. HAMILTON,
Vice-Consul.

PALMA AGENCY.

Quarter ending March 31.

Cochineal and granilla	$55,831 07
Sulphur	2,135 49
Bones	2,600 00
Total	60,566 56

Quarter ending June 30.

Cochineal	$26,429 21

JUAN RODRIGUEZ Y GONZALES,
Consular Agent.

MADEIRA.

FUNCHAL.

Quarter ending March 31, 1883.

Wine	$5,150 74
Vine cuttings	63 55
Total	5,214 29

Quarter ending June 30, 1883.

Wine	$10,402 04
Wicker work	130 00
Total	10,532 04

L. DU PONT-SYLE,
Consul.

ALGERIA.

Quarter ending March 31, 1883.

Algiers:		
1,061 bales vegetable hair	$3,935 22	
Fancy articles, Algerian products	322 20	
		$4,255 42
Oran:		
25,609 tons iron ore	48,657 10	
2,551 bales vegetable hair	8,139 41	
200 dozen goat-skins	1,200 00	
		57,996 51
Total		62,251 93

Quarter ending June 30, 1883.

Algiers: 2,838 bales vegetable hair	$10,366 0[illegible]
Oran: 500 bales vegetable hair	1,856 [illegible]
	12,222 [illegible]

ALEX. JOURDAN,
Consul.

MOROCCO, TUNIS, AND TRIPOLI.

Nil.

EGYPT.

CAIRO DISTRICT.

Quarter ending March 31, 1883.

Gum-arabic	$37,486 [illegible]
Senna	8,695 [illegible]
Sundries	8,619 [illegible]
Ostrich feathers	1,042 [illegible]
Raw skins	50,727 [illegible]
Cotton rags	8,190 [illegible]
Hides	690 [illegible]
Tortoise shells	198 [illegible]
Total	115,657 [illegible]

N. D. COMANOS,
Vice-Consul-General in charge.

SOUTHERN DIVISION.

(The southern division of the continent of Africa may be defined as follows: From Cape Verde on the west coast around by the Cape of Good Hope and down the east coast to Cape Guardafui. This, for convenience and for the better understanding of the large and complicated trade thereof, may be separated into three distinct commercial subdivisions, viz, the West Coast, embracing Senegambia, Liberia, Upper and Lower Guinea, and the colonies therein; the south coast, embracing the British possessions of Cape Colony and Natal; and the east coast, embracing the native states from Cape Colony to Cape Guardafui, together with the islands of Madagascar, Zanzibar, and the British and French islands of Mauritius and Réunion.)

THE WEST COAST.

(The West Coast embraces Senegal (French), Gambia (British), Sierra Leone (British), Liberia, The Gold Coast (British), Gaboon (French), Lagos (British), the Portuguese settlement of St. Paul de Loanda, Benguela, Mossamedes and Ambriz, and the native states. The United States has consular representatives only at Sierra Leone, Liberia, Gaboon, and St. Paul de Loanda.)

CAPE VERDE ISLANDS.

SANTIAGO.

Quarter ending March 31, 1883.

Hides, 99 pounds	$7 22
Goat-skins, 7,765	4,900 83
Wool, 2,213 pounds	138 31
Old metal, 1,074 pounds	76 88
Goat-skins, 1,553	1,000 00
Duties and charges for shipping	477 72
Total	6,660 96

Quarter ending June 30, 1883.

6,876 Cape Verde Islands goat-skins	$2,466 81
2 bales Cape Verde Manila hemp	10 40
Export duty and shipping charges	264 74
Invoice certificate	2 50
Total	2,744 45

HENRY PEASE,
Consul.

SIERRA LEONE.

Quarter ending March 31, 1883.

Dry hides	$37,922 57
Cam wood	227 75
Ginger	9,080 62
Rubber	421 21
Raw gold	254 40
Bones, $161.25; horns, $64.80; hoofs and piths, $13.93	239 98
Peanuts	50 04
Ivory	193 74
Composition and copper	121 77
Coffee	51 00
Leopard, tiger-cat, monkeys, baboons, parrots, snakes, alligators, &c	507 90
Total	49,070 98

Quarter ending June 30, 1883.

Dry ginger-root, 431,717 pounds	$31,061 69
Dry hides, 14,219—133,942 pounds	20,811 93
India rubber, 764 pounds	303 66
Parrots, 197	372 12
Ground-nuts, 12,068 pounds	132 36
Ivory, 90 pounds	129 54
Old composition, 317 pounds	10 44
Old copper, 88 pounds	9 60
Bones, 5,370 pounds	26 88
Hoofs, horns, and horn-piths	7 68
Total	52,865 90

Per bark Monrovia to New York; per schooner Navarino to Boston.

JUDSON A. LEWIS,
Consul.

LIBERIA.

(No returns.)

GABOON.

(No returns.)

ST. PAUL DE LOANDA.

(No returns.)

THE SOUTH COAST.

(CAPE COLONY AND NATAL.)

CAPE COLONY.

CAPE TOWN.

Quarter ending March 31, 1883.

Ostrich feathers	$68,609 51
Wool	43,060 15
Miscellaneous	3,116 90
Total	114,786 56

Quarter ending June 30, 1883.

Ostrich feathers	$66,854 41
Wool	22,152 90
Diamonds, rough	2,601 38
Wine	84 00
Total	91,692 69

JAS. W. SILER,
Consul.

PORT ELIZABETH.

(An agency under Cape Town.)

Quarter ending March 31, 1883.

Skins, goat, kid, and cape	$56,502 10
Feathers, ostrich	32,559 96
Hides	3,311 34
Wool	103,994 32
Iron, old	647 38
Total	197,015 10

Quarter ending June 30, 1883.

Skins, angora and goat	$53,831 19
Wool	77,539 94
Feathers, ostrich	8,947 94
Diamonds	749 53
Hides	617 80
Iron, old	744 50
Total	142,430 90

JNO. W. PHILIP,
Consular Agent.

THE EAST COAST.

(The East Coast, from Natal to Cape Guardafui, embraces the Portuguese settlements of Delagoa Bay, Sofala, and Mozambique, the native States of Zanguebar and Ajan, and the outlying islands of Madagascar, Zanzibar, Réunion, Mauritius, the Seychelles, &c.)

ZANZIBAR.

ZANZIBAR.

Fractional quarter ending March 8.

Large ivory, 233 tusks	$44,944 06
Ball ivory, 233 cut points	8,642 43
Scrivellos ivory, 64 tusks	1,266 96
Gum copal, 97 cases	14,701 68
Cloves, 1,802 bales	32,188 00
Clove stems, 1,527 bales	5,082 16
Red peppers, 63 bales	1,486 00
Goat-skins, 2 bales	116 50
Ebony, 1,584 pieces	639 98
Shells, 23 cases	395 08
Molasses, 2 casks	6 39
Total	109,469 24

LEONARD A. BACHELDER,
Consul.

From March 9 *to March* 31, 1883, *inclusive.*

Gum copal, 85 cases	$13,018 00
India rubber, 56 cases, 28 bales	13,469 43
Ebony, 524 logs	690 01
Dry hides, 22,560	45,227 59
Cloves, 223 bales	3,598 03
Gum myrrh, 26 cases	1,143 89
Goat-skins, 137 bales	6,074 29
Salt hides, 4,222	8,284 81
Large ivory, 66 tusks	15,076 06

Ball ivory, 1 bundle	$165 94
Scrivellos ivory, 7 bundles	1,382 97
Red peppers, 250 bales	4,172 79
Total	112,303 81
Total for quarter	221,773 05

WALTER H. TRUMBULL,
Vice-Consul.

MADAGASCAR.

(Tamatave and the agencies of Andakabe and Majonga.)

TAMATAVE.

Quarter ending March 31, 1883.

Dry salted hides	$149,654 34
India rubber	31,486 80
Coffee	3,893 71
Vanilla beans	590 37½
Sheep pelts	93 02
Rofia	25 29
Orchids	20 50
Total	185,694 03½

R. M. WHITNEY,
Vice-Consul.

MAJONGA AGENCY.

Quarter ending March 31, 1883.

22,709 dry salted hides	$35,340 13
24,926 dry salted hides	49,993 20
20,655 pounds rubber	11,031 45
Total	96,364 78

P. W. TAYLOR,
Acting Consular Agent.

MAURITIUS.

PORT LOUIS.

Quarter ending March 31, 1883.

Sugar	$30,087 [illegible]

Quarter ending June 30, 1883.

Sugar	$263,675 05

THOMAS PRENTIS,
Consul.

RÉUNION.

(No returns.)

EXPORTS DECLARED IN AMERICA.

BRITISH NORTH AMERICA.

DOMINION OF CANADA.

PROVINCE OF ONTARIO.

AMHERSTBURG.

Quarter ending March 31, 1883.

Cordwood	$6,240	40
Staves	3,801	16
Stave bolts	2,188	37
Charcoal	1,187	00
Logs	317	00
Lumber	19,375	54
Piles	115	05
Lime	245	00
Beans	9,423	75
Wheat	7,691	38
Barley	297	83
Fertilizer	72	80
Furniture	62	00
Breeding stock	1,395	00
Horse	75	00
Miscellaneous	526	00
Total	53,013	28

Quarter ending June 30, 1883.

Cord-wood	$2,841	00
Spokes	1,000	00
Hoops	1,627	50
Raw furs	585	35
Lumber	18,846	14
Stave-bolts	1,859	50
Staves	4,846	76
Railroad ties	19,380	40
Logs	6,915	00
Charcoal	1,551	50
Barley	787	50
Beans	1,400	00
Horses	665	00
Cattle	761	00
Timber	200	00
Piles	600	00
Miscellaneous	584	00
Total	64,450	65

JOSIAH TURNER,
Consul.

BELLEVILLE.

Quarter ending March 31, 1883.

Barley (249,580 bushels)	$193,684 59
Horses (73)	8,656 25
Household goods (112 persons represented)	6,076 92
Live stock (cows and pigs)	584 50
Fresh fish	548 88
Potatoes	453 75
Bones	360 00
Hides	510 00
Goods, the product of the United States	906 75
Miscellaneous	426 01
Total	212,209 65

Quarter ending June 30, 1883.

Barley (110,417 bushels)	$82,065 21
Rye (66,213 bushels)	50,492 00
Lumber (14,350,213 feet)	178,081 84
Eggs	27,143 06
Household goods (62 persons represented)	4,399 00
Horses (35)	4,352 50
Bones	990 00
Skins	20,281 59
Miscellaneous	1,100 75
Total	368,905 95

FREDK. W. PRINCE,
Consul.

CHATHAM AND AGENCY.

(Agency of Wallaceburg.)

CHATHAM.

Quarter ending March 31, 1883.

Beans	$70,179 44
Barley	1,461 15
Cord-wood	556 00
Clover-seed	15,419 73
Furs	1,284 19
Hay	245 00
Lumber	1,615 22
Logs	60 00
Malt	1,644 44
Staves, hoops, and headings	12,633 58
Sugar-pipe staves	2,808 00
Settlers' effects	5,552 00
Stock	7,096 00
Ship plank	6,380 00
Miscellaneous	3,787 13
Total	130,641 88

Quarter ending June 30, 1883.

Beans	$7,776 97
Bolts	3,197 75
Barley	199 80
Cord-wood	7,950 50
Eggs	25,038 00
Hay	1,492 50
Logs	8,870 00
Lumber	9,965 59
Malt	64,930 65

Stock	$4,581 00
Sugar-pipe staves	2,184 00
Ship plank	3,600 00
Staves, hoops, and headings	14,303 03
Settlers' effects	15,998 13
Miscellaneous	3,256 82
Total	173,344 74

H. C. BUFFINGTON,
Commercial Agent.

WALLACEBURG AGENCY.

Quarter ending March 31, 1883.

	September 30, 1882.
Stave-bolts	$2,455 00
Settlers' effects	637 50
Oak flitch	737 83
Total	3,830 33

Quarter ending June 30, 1883.

Stave-bolts	$23,433 00
Cord-wood	24,935 25
Settlers' effects	445 50
Logs	16,018 50
Lumber	5,936 37
Oak flitch	306 50
Railroad ties	6,030 50
Ship and round timber	2,198 96
Miscellaneous	123 67
Total	79,428 25

D. C. HUNTOON,
Consular Agent.

CLIFTON AND AGENCY.

(Agency of Saint Catherines.)

Quarter ending ——, 1883.

Barley	$15,701 45
Butter	40 00
Bones	230 63
Cattle	3,871 75
Flax	464 60
Fish (fresh)	359 55
Hay	267 91
Household goods	1,580 00
Horses	4,122 00
Iron (scrap)	227.50
Lumber	1,793 28
Mill-feed	7,374 70
Malt	1,763 51
Pulp (wood, dry)	3,705 79
Potatoes	180 00
Sheep	1,179 57
Turnips	523 27
Wood (poplar and spruce)	7,764 85
Sundry manufactured articles	1,563 89
Total	52,714 25

JAMES LOW.

COATICOOK AND AGENCIES.

(Agencies: Georgeville, Hereford, Linebro, Potton, and Stanstead.)

COATICOOK.

Quarter ending March 31, 1883.

Animals	$13,269 00
Barrels, empty	150 00
Bark, hemlock	1,382 00
Beans	111 00
Brick	36 00
Butter	1,832 00
Copper, fine	32,884 00
Cotton-waste	2,357 00
Goods, household	3,682 00
Hay	2,205 00
Hides, green	1,528 00
Iron, old scrap	4,370 00
Lumber	5,697 00
Oats	1,266 00
Piles	964 00
Poles, hop	153 00
Potatoes	1,459 00
Straw	190 00
Turnips	322 00
Tin sap-buckets and holders	76 00
Wood	2,223 00
Miscellaneous	43 00
Total	76,224 00

Quarter ending June 30, 1883.

Animals	$62,202 00
Bark, hemlock	4,540 00
Barrels, empty	118 00
Beans	50 00
Beef	116 00
Boxes	112 00
Copper, fine	50,053 00
Eggs	87 00
Flour	176 00
Goods, household	2,815 00
Granite	288 00
Hay	541 00
Harness	48 00
Hides, green	2,296 00
Iron, old	3,181 00
Lumber	26,494 00
Oats	461 00
Piles	543 00
Potatoes	1,406 00
Salt	95 00
Sleigh	3 00
Straw	120 00
Teeth, harrow	538 00
Ties, railroad	1,139 06
Timber, ship	130 00
Wagons	88 00
Wheel, water	150 00
Wood	3,331 00
Miscellaneous	6 00
Total	161,127 00

J. G. CRAWFORD,
Consul.

COLLINGWOOD AND AGENCIES.

(Agencies: Orillia, Owen Sound, and Sault Ste. Marie.)

COLLINGWOOD.

Quarter ending March 31, 1883.

Live stock	$6,396 00
Grain	1,657 75
Settlers' effects	1,068 25
Miscellaneous	142 80
Total	9,264 80

Quarter ending June 30, 1883.

Lumber	$62,448 31
Fresh fish	13,888 16
Salt fish	610 50
Settlers' effects	4,669 00
Miscellaneous	1,321 40
Total	82,937 37

CHARLES A. BOUSH,
Consul.

ORILLIA AGENCY.

Quarter ending March 31, 1883.

Lumber	$6,876 78
Shingles	5,679 68
Barley	3,338 75
Raw furs	1,774 89
Hop poles	1,478 21
Potatoes	1,024 80
Settlers' effects	979 50
Tan-bark	198 00
Butter	195 87
Sleigh poles	129 67
Poultry	39 00
Eggs	6 00
Total	21,721 15

Quarter ending June 30, 1883.

Settlers' effects	$4,201 50
Shingles	3,054 63
Eggs	2,625 00
Lumber	2,123 23
Raw furs	1,256 85
Telegraph poles	478 20
Potatoes	460 00
Hop poles	272 24
Machinery	64 50
Anchors and chains	55 00
Cedar posts	35 37
Stuffed deer's heads	8 00
Dogs	5 00
Total	14,639 52

CHAS. CORBOULD,
Agent.

OWEN SOUND AGENCY.

Quarter ending March 31, 1883.

Butter	$21 00
Settlers' effects	195 00
Total	216 00

Quarter ending June 30, 1883.

Cedar ties, posts, &c	$12,560 00
Stallion	300 00
Eggs	192 00
Settlers' effects	1,010 00
Total	14,062 00

EDW. TODD,
Agent.

SAULT STE. MARIE AGENCY.

Quarter ending June 30, 1883.

Live cattle	$230 00
Raw fur	3,251 00
Fresh beef	453 62
Horses	700 00
Personal effects	1,107 00
Butter	82 65
Fresh fish	6,251 79
Salt fish	800 00
Railroad ties	2,860 00
Total	15,736 06

JNO. A. COLWELL,
Agent.

FORT ERIE.

Quarter ending March 31, 1883.

Animals, living	$8,815 00
Barley	5,562 00
Beans	932 00
Butter	266 00
Eggs	403 00
Hay	1,505 00
Lumber	623 00
Personal effects, household, &c	1,598 00
Stave bolts	2,141 00
Timber, ship	1,437 00
Miscellaneous	553 00
Total	23,885 00

Quarter ending June 30, 1883.

Barley	$4,856 50
Cattle	490 00
Eggs	751 00
Hay	774 00
Horses	11,058 00
Household and personal effects	1,364 00
Lumber	5,223 00
Pease	984 00
Rye	9,129 00
Skins	656 00
Staves	2,623 45
Timber	21,852 50
Wheat	34,776 00
Sundries	8,804 96
Total	103,735 96

LA RUE PECK,
Consul.

GODERICH AND AGENCY.

(Agency: Stratford.)

GODERICH.

Quarter ending March 31, 1883.

Animals	$31,492 50
Barley	14,729 20
Household effects	4,171 00
Lumber, pine	134 50
Total	50,527 20

Quarter ending June 30, 1883.

Horses	$4,435 00
Barley	700 00
Household goods	3,172 00
Salt	8,618 50
Miscellaneous	223 00
Total	17,148 50

R. S. CHILTON,
Commercial Agent.

STRATFORD AGENCY.

Quarter ending March 31, 1883.

Apples	$785 20
Barley	123,836 20
Cattle, neat	10,577 20
Eggs	4,729 00
Flax	24,475 34
Horses	41,536 25
Lumber	1,642 39
Malt	1,273 20
Potatoes	2,108 45
Pease	322 00
Sheep and lambs	6,436 10
Telegraph poles	663 50
Tow	20,641 23
Wheat	9,400 00
Miscellaneous	2,666 98
Personal effects	17,019 50
Total	268,112 54

Quarter ending June 30, 1883.

Barley	$29,477 75
Cattle	14,778 00
Eggs	94,392 37
Flax	29,077 06
Fish	1,831 11
Horses	10,511 00
Lumber	3,159 00
Potatoes	8,879 69
Pease	1,152 00
Salt	810 00
Telegraph poles	3,984 29
Turnips	318 00
Tow	23,533 28
Personal effects	15,975 00
Miscellaneous	3,189 72
Total	241,068 27

JAS. S. BENEDICT,
Agent.

GUELPH.

Quarter ending March 31, 1883.

Barley	$15,559
Bran	442
Buttons, vegetable ivory	193
Cattle	14,750
Horses	1,390
Lumber	200
Organs	1,850
Pease	2,047
Pease, split	1,950
Personal effects	9,672
Sewing-machines	1,684
Tow and tow waste	615
Turnips	1,635
Total	51,992

Quarter edning June 30, 1883.

Animals	$36,79[illegible]
Ashes	620
Barley	21,666
Bran	1,619
Eggs	73,437
Flour	685
Flax	7,194
Household effects	10,869
Lumber	4,224
Malt	92,563
Potatoes	5,530
Pease	8,515
Steel springs	425
Turnips	271
Tow waste	1,000
Miscellaneous	17,773
Total	283,125

HARRY P. DILL,
Consul.

HAMILTON AND AGENCY.

(Agency: Paris.)

HAMILTON.

Quarter ending March 31, 1883.

Animals	$22,437
Apples	500
Barley	57,912
Bones	57[illegible]
Cotton waste	2,75[illegible]
Household effects	7,309
Lumber	5,749
Malt	42,990
Machinery	639
Sewing-machines	4,775
Skins of animals	11,649
Scrap iron and steel	2,913
Wool	31,690
Miscellaneous	5,997
Total	197,904

Quarter ending June 30, 1883.

Animals	$7,615 38
Barley	3,264 30
Cotton waste	2,282 36
Eggs	6,769 40
Granite	594 86
Lumber	9,934 94
Malt	53,528 83
Machinery	1,962 50
Rye	5,609 50
Sewing-machines	4,339 10
Skins of animals	9,688 56
Scrap iron	272 00
Settlers' effects	9,783 00
Wheat	47,791 50
Wool	30,000 71
Miscellaneous	6,791 21
Total	200,228 15

FRANK LELAND,
Consul.

PARIS AGENCY.

Quarter ending March 31, 1883.

Animals	$16,973 48
Barley	99,595 22
Beans	3,748 29
Malt	6,937 07
Machinery	9,908 75
Potatoes	572 55
Split pease	13,365 20
Settlers' effects	5,253 00
Turnips	4,906 57
Miscellaneous	3,957 60
Total	165,217 73

Quarter ending June 30, 1883.

Animals	$20,874 50
Barley	18,435 80
Eggs	10,202 72
Flax	4,711 60
Malt	30,712 19
Machinery	15,492 55
Split pease	7,209 03
Skins of animals	10,895 20
Settlers' effects	8,260 00
Miscellaneous	9,356 65
Total	136,150 24

E. M. SHARP,
Consular Agent.

KINGSTON AND AGENCIES.

(Agencies: Deseronto, Gananoque, Napanee, and Picton.)

KINGSTON.

Quarter ending March 31, 1883.

Barley, 50,621 bushels	$37,732 76
Buckwheat, 1,787 bushels	804 03
Cattle	6,758 36
Furs, raw	6,814 85
Horses	7,968 75
Hay, 944 tons	9,243 32
Lumber	325 00

Malt	$20,603 [illegible]
Miscellaneous	1,121 40
Seed pease and beans	1,122 60
Phosphate, 50 tons	500 00
Hop poles and posts	1,200 00
Varnish	31,022 46
Total	125,316 [illegible]

Quarter ending June 30, 1883.

Barley, 51,758 bushels	$36,913 [illegible]
Buckwheat, 505 bushels	277 75
Cattle, 217 head	4,524 85
Furs, raw	19,079 29
Horses, 64 head	7,946 00
Hay, 1,461 tons	14,610 00
Lumber	26,370 00
Malt, 97,613 bushels	78,096 [illegible]
Hay press, 1	200 00
Hop poles	50 00
Limestone	100 00
Old junk	297 75
Hides	372 00
Iron ore, 8,020 tons	16,470 00
Personal effects	5,310 00
Bones	400 00
Skiffs, 2	135 00
Rye, 39,142 bushels	26,472 [illegible]
Railroad ties and posts	4,179 00
Varnish	82,673 [illegible]
Total	324,739 [illegible]

M. H. TWITCHELL,
Consul.

DESERONTO AGENCY.

Quarter ending March 31, 1883.

Lumber	$396 [illegible]
Shingles	1,046 [illegible]
Charcoal	5 00
Pitch	2 00
Sawdust	3 00
Barley	5,571 00
Total	7,023 76

Quarter ending June 20, 1883.

Lumber	$73,940 [illegible]
Pickets	204 [illegible]
Sash	90 00
Bed slats	79 50
Mouldings	319 50
Shingles	6,308 [illegible]
Posts	2,709 [illegible]
Lath	4,790 [illegible]
Railway ties	3,909 [illegible]
Flour	97 50
Timber	60 [illegible]
Heading	[illegible]
Paving blocks	[illegible]
Broom-handles	520 [illegible]
Doors	230 [illegible]
Telegraph poles	97 [illegible]
Hop poles	3 [illegible]
Total	93,739 [illegible]

R. C. CARTER,
Consular Agent.

GAÑANOQUE AGENCY.

Quarter ending March 31, 1883.

11,640	bushels barley	$7,968 00
15	bulls (yearlings)	171 00
23	cows	565 00
35	head cattle (yearlings and heifers)	357 00
8	horses	750 00
69½	tons pressed hay	695 00
10	M feet hemlock lumber	100 00
5,300	feet pine lumber (dressed)	95 40
8,000	lath	14 40
15,000	shingles (cedar)	34 50
12	sash and 6 doors	15 60
225	pounds tarred paper	7 31
	Total	10,773 21

Quarter ending June 30, 1883.

7,504 bushels barley, at 60 cents	$4,502 40
11,878 dozen eggs	1,754 30
Household goods and wearing apparel	2,004 00
13 horses	1,445 00
15,900 pounds hides, at 7 cents, $1,113; 200 decon skins, $140; and 20 veal, $19.47	1,272 47
5,472 feet hemlock lumber	64 72
11,368 feet pine lumber	176 91
13,952 feet elm plank	146 99
5,250 feet oak plank	126 50
1,289 feet pine plank	69 56
3,116 feet pine logs	28 04
10,905 feet hemlock logs	65 43
300 standard hemlock logs	375 00
5,000 feet pine binders	75 00
5,997 bushels rye	4,198 20
20,000 cedar shingles	51 45
21,070 feet round timber	850 00
Total	17,205 00

E. E. ABBOTT,
Consular Agent.

NAPANEE AGENCY.

Quarter ending March 31, 1883.

Barley	$142,373 32
Cattle	3,351 15
Horses	2,552 00
Oxen	360 00
Fish	45 00
Hides	1,500 00
Brood mare	120 00
Brood sow	15 00
Pork	79 50
Sewing machine	15 00
Harrow	20 00
Vetches	1 50
Household furniture and sundries	262 87
Total	150,695 34

Quarter ending June 30, 1883.

Barley	$74,336 27
Eggs	17,757 71
Rye	10,073 25
Hides	3,367 59
Horses	3,117 50
Cattle	615 50

Bulls	$428
Scrap-iron	275
Calf skins	209
Decon skins	129
Bones	100
Hogs	22
Sundries	123
Total	110,665

W. S. WILLIAMS,
Consular Agent.

PICTON AGENCY.

Quarter ending March 31, 1883.

Barley, 12,357 bushels	$8,979
Cows, 23 head	557
Fish, 1,574 pounds (fresh)	71
Horses, 9 head	1,000
Total	10,608

Quarter ending June 30, 1883.

Barley, 24,561 bushels	$17,322
Cows, 495 head	12,242
Eggs, 121,309 dozen	17,374
Fish, fresh, 2,773 pounds	83
Horses, 56 head	6,065
Hop poles, 15,778	571
Household goods	742
Hair, cattle's, 2,625 pounds	58
Apples, evaporated, 500 pounds	55
Rye, 15,618 bushels	9,997
Stove bolts, 1,156 cords	3,452
Oil, 207 barrels	145
Telegraph poles, 33 pieces	33
Ties, railroad, 1,004 pieces	255
Wood, 109 cords	345
Water wheels, 2 pieces	140
Total	68,932

ROBERT CLAPP,
Consular Agent.

MORRISBURG AND AGENCY.

(Agency: Cornwall.)

MORRISBURG.

Quarter ending March 31, 1883.

Barley	$13,315
Pease	128
Horses	4,585
Personal effects	809
Cattle	5,608
Hop poles	1,163
Potatoes	300
Hay	3,551
Eggs	540
Miscellaneous	215
Hides	495
Paper rags	3,455
Household effects	2,065
Total	36,22

A. B. ELLIOTT,
Commercial Agent.

CORNWALL AGENCY.

Quarter ending March 31, 1883.

Eggs	$78 20
Cattle	2,365 50
Hay	3,046 26
Grain	808 06
Horses	6,012 00
Household effects	2,374 50
Hop poles	11,699 79
Miscellaneous	291 14
Sheep and lambs	13 00
Total	26,688 95
United States manufacture returned	480 00
Machinery sent for repairs	137 50

Quarter ending June 30, 1883.

Eggs	$14,069 60
Cattle	1,760 00
Skins hides	1,646 88
Grain	557 29
Horses	9,333 00
Household effects	1,863 65
Lumber	578 86
Miscellaneous	35 68
Machinery	197 12
Hop poles	1,257 50
Hay	2,044 52
Total	33,344 10
Machinery sent to the United States for repairs	115 00
Machinery returned	1,570 00

HENRY W. WEBER,
Consular Agent.

OTTAWA AND AGENCIES.

(Agencies: Grenville and Smith's Falls.)

OTTAWA.

Quarter ending March 31, 1883.

Breeding animals	$600 00
Bridge timber	1,024 41
Deals	85 35
Horses	695 01
Hop poles	3,782 04
Iron ore	2,253 18
Lath	28,229 98
Lumber (sawn)	99,941 04
Match splints	1,108 95
Pickets	4,470 20
Poultry	505 00
Rye	19,919 49
Shingles	303 00
Settlers' effects	2,120 00
Miscellaneous	1,160 02
Total	166,197 67

Quarter ending June 30, 1883.

Animals (for breeding purposes)	$150 0
Box shooks	4,472 6
Bones (for fertilizing)	471 5
Butter deals	7,747 1
Dimension timber	3,067 3
Eggs	9,354 1
Fence posts	679 5
Hop poles	108 0
Horses	1,615 0
Laths	3,985 8
Lumber (sawn)	703,013 4
Match splints and blocks	2,015 1
Pickets	5,716 0
Railway ties	7,594 0
Skins and furs	1,925 0
Settlers' effects	9,158 0
Telegraph poles	879 2
Miscellaneous	1,522 8
Total	763,474 8

R. B. ROBBINS,
Commercial Agent.

GRENVILLE AGENCY.

Quarter ending June 30, 1883.

Hides	$669 0
Eggs	700 9
Lumber (sawn)	53,805 4
Match splints	4,860 8
Settlers' effects	220 0
Total	60,256 2

ALEXANDER PRIDHAM,
Consular Agent.

PORT HOPE.

Quarter ending March 31, 1883.

Apples	$1,808 0
Barley	149,895 5
Eggs	675 0
Emigrant effects	6,892 9
Hides	1,731 1
Horses	8,041 5
Horses (breeding)	750 0
Lumber	2,913 3
Pease	43,343 7
Potatoes	1,099 5
Wheat	1,530 0
Wool	3,687 3
Miscellaneous	2,939 3
Total	225,307 3

Quarter ending June 30, 1883.

Barley	$118,819 2
Cattle	10,097 5
Eggs	31,055 4
Emigrant effects	4,715 5
Hides	6,477 2
Horses	23,410 3
Lumber	267,565 1
Pease	10,294 8
Rye	38,954 4
Shingles	19,941 2
Wheat	97,253 0
Miscellaneous	8,807 2
Total	637,481 2

J. C. DUTCHER,
Consul.

PORT ROWAN.

Quarter ending March 31, 1883.

Barley	$75,400 02
Beans	5,553 53
Buckwheat	2,617 02
Cattle	8,095 00
Eggs	1,589 20
Horses	15,892 00
Lumber	3,602 60
Pease	15,633 25
Sheep and lambs	3,131 40
Miscellaneous	1,935 65
Value of goods on emigrant certificates, $5,895.75.	
Total	133,449 67

JOHN F. JENNE,
Commercial Agent.

PORT SARNIA AND AGENCY.

(Agency: London.)

PORT SARNIA.

Quarter ending March 31, 1883.

Animals of all kinds	$14,850 00
Bones	300 00
Engines and boilers	1,007 00
Eggs	1,176 10
Fish	955 00
Grain of all kinds	34,202 72
Lumber and timber	345 81
Personal effects	38,420 00
Potash	174 00
Potatoes	412 00
Paper stock	2.527 00
Scrap-iron	445 50
Stone	172 96
Total	94.988 09

SAML. D. PACE.

LONDON AGENCY.

Quarter ending March 31, 1883.

Animals of all kinds	$91,877 90
Barley	69,304 04
Beans	468 00
Car-wheels, old	3.283 59
Flax	12,350 42
Figs	871 76
Fertilizer	493 36
Hides and skins	4,151 10
Household goods	9,433 75
Lumber and staves	1,756 75
Malt	2,602 64
Manufactured goods	3,094 07
Onions	378 90
Oils	808 90
Potatoes	708 05
Pease	437 20
Poultry	670 24
Paper stock	379 00
Wool	2,118 06
Miscellaneous	92 70
Total	205,280 43
Corresponding period, 1882	229,126 06
Decrease	23,845 63

WM. H. McCUTCHEON.

PORT STANLEY AND SAINT THOMAS AND AGENCY.

(Agency: Courtright.)

PORT STANLEY AND SAINT THOMAS.

Quarter ending March 31, 1883.

Barley	$25,061 40
Staves	16,345 01
Household effects	17,033 40
Horses	8,553 00
Rattan	7,804 30
Hoops	7,136 59
Apples	4,710 50
Clover seed	3,975 90
Breeding stock	3,277 00
Sheep and lambs	4,491 40
Potatoes	4,612 00
Flax	1,834 77
Lumber	1,482 49
Cattle	1,486 00
Scrap iron	1,273 77
Turnips	631 01
Miscellaneous	2,294 90
Total	112,005 24

Quarter ending June 30, 1883.

Wheat	$41,752 62
Staves	26,974 00
Malt	23,804 35
Hoops	18,441 40
Household effects	17,805 00
Eggs	11,259 79
Lumber	10,489 53
Cattle	5,971 61
Barley	5,358 00
Bolts	3,680 50
Potatoes	3,255 25
Pease	2,641 00
Breeding animals	1,882 00
Flax	2,365 35
Tow	1,350 30
Sheep	1,280 00
Bran	1,227 00
Miscellaneous	6,141 90
Total	185,572 11

PHILIP CARROLL,
Commercial Agent.

COURTRIGHT AGENCY.

Quarter ending March 31, 1883.

Live stock	$911 00
Hides	308 56
Timber	1,386 00
Dressed meat	116 42
Grain	54 00
Emigrant	101 00
Total	2,877 38

Quarter ending June 30, 1883.

Stock	$10,650 00
Emigrants	1,910 00
Fresh meat	163 00
Timber and bolts	1,882 50
Grain	1,510 29
Total	16,115 79

F. W. BOBY,
Consular Agent.

PRESCOTT AND AGENCY.

(Agency: Brockville.)

PRESCOTT.

Quarter ending March 31, 1883.

Butter	$664 00
Eggs	292 65
Cattle	4,281 00
Furs, skins, hides	696 25
Grain	17,109 75
Horses	1,845 00
Household effects	300 00
Lumber, shingles, &c	2,606 46
Meat and poultry	10 00
Whisky	1,642 00
Hops	375 00
Fresh fish	146 00
Pressed hay	3,560 90
Sheep and lambs	1,022 11
Potatoes	8,536 60
Straw	366 25
Hop-poles	8,750 05
Total	52,204 02

Quarter ending June 30, 1883.

Pressed hay	$2,152 52
Eggs	23,706 62
Cattle	1,015 00
Furs, skins, hides	3,450 98
Grain	343 00
Horses	3,284 00
Household effects	1,834 00
Lumber, shingles, &c	3,111 68
Potatoes	11,750 88
Miscellaneous	25 00
Machinery and ironware	330 00
Timber, logs, &c	2,405 70
Whisky	416 16
Total	53,825 54

HARRY L. SLAGHT,
Consul.

BROCKVILLE AGENCY.

Quarter ending March 31, 1883.

Butter, 1,249 pounds	$232 96
Cattle, 691 head	9,506 00
Sheep and lambs, 668 head	2,355 00
Horses, 50 head	5,561 00
Household effects	5,412 00
Lumber, 23,668 feet	6,855 00
Miscellaneous, sundries	365 00
Machinery and ironware, castings	1,748 00
Pickets, 41,581	603 00
Shingles, 55 M	447 00
Lath, 24,888	504 00
Potatoes, 2,519 bushels	1,143 00
Wool, 17,727 pounds,	3,811 00
Hop-poles, 343,822	17,228 00
Rye, 33,960 bushels	19,632 00
Buckwheat, 12,775 bushels	6,720 00
Barley, 4,588 bushels	2,570 00
Poultry, 3,009 pounds	451 00
Buckwheat flour, 48,900 pounds	1,041 00
Beans	57 00
Total	86,281 96

Furs, raw	$8,000 00
Hides and pelts	6,780 50
Cattle, sheep, and lambs	31,936 57
Machinery and implements	1,397 90
Malt	28,240 36
Beans and peas	8,249 55
Pine lumber	13,462 [illegible]
Clover-seed	14,117 10
Rye	1,688 60
Wool	51,440 21
Wheat and flour	3,101 25
Books	4,681 14
Potatoes	7,237 [illegible]
Cotton waste	2,013 03
Miscellaneous	12,833 19
Total	672,507 [illegible]

Quarter ending June 30, 1883.

Animals for breeding purposes	$24,335 00
Horses	21,047 50
Cattle	3,491 00
Barley	201,015 84
Peas	37,853 02
Bones	4,963 35
Tea	4,519 99
Cotton waste	10,764 01
Wheat	165,310 15
Eggs	17,825 [illegible]
Furs, raw	35,024 45
Hides and pelts	6,025 24
Lumber	220,002 42
Machinery	3,844 06
Malt	282,874 26
Telegraph-poles	7,901 90
Wool	11,876 00
Potatoes	2,128 07
Rye	15,395 84
Miscellaneous	18,076 75
	1,094,275 32

WM. C. HOWELLS,
Consul.

WINDSOR.

Quarter ending March 31, 1883.

Straw braid and hats	$10,222 13
Animals	10,114 00
Fish	9,689 11
Charcoal	4,968 00
Hides and skins	3,949 00
Tobacco	2,763 00
Stuffed birds	1,600 00
Personal effects	1,590 00
Wood	1,281 00
Malt	759 45
Flower seeds	574 25
Spirits	503 [illegible]
Potatoes	312 25
Apples	315 00
Eggs	237 60
Gilling nets	226 70
Miscellaneous	1,582 75
Total	50,738 15

Quarter ending June 30.

Animals	$27,998 40
Malt	17,336 97
Charcoal	6,052 22
Fish	3,672 51
Wood	8,164 06
Hides and furs	2,840 42
Lumber	2,090 49
Stave and heading bolts	2,343 25
Logs	8,354 00
Personal effects	1,825 00
Spirits	1,922 35
Tobacco	738 00
Straw-braid and hats	1,402 67
Eggs	1,601 78
Ivory blocks	924 75
Cedar posts	2,025 00
Miscellaneous	2,282 38
Total	91,574 25

CHARLES EWERS,
Consul.

PROVINCE OF QUEBEC.

MONTREAL AND AGENCIES.

(No returns.)

QUEBEC.

Quarter ending March 31, 1883.

Articles.	Quebec.	Point Levi.	Total.
Animals		$28,647 00	$28,647 00
Bark		3,793 00	3,793 00
Butter	$1,030 45		1,030 45
Emigrants' effects	1,110 00		1,110 00
Fish	2,069 01		2,069 01
Lumber	89 60	19,047 53	19,137 13
Wood pulp	120 00	1,128 00	1,248 00
Potatoes		8,947 06	8,947 06
Miscellaneous	1,924 37	3,141 39	5,065 76
Totals	6,343 43	64,703 98	71,047 41

JNO. N. WASSON,
Consul.

SAINT HYACINTHE.

Quarter ending June 30, 1883.

Bark, hemlock	$17,932 00
Beans	179 00
Eggs	879 80
Hay	19,705 55
Hides	1,203 80
Horses	9,370 25
Lumber	15,529 75
Oats	909 87
Pickets	160 00
Potatoes	205 00
Straw	1,829 75
Sundries	848 20
Wood, slab	209 20
Total	68,962 17

Quarter ending March 31, 1883.

Bark, hemlock, 1,294 cords	$6,683 00
Beans, 333 bushels	546 58
Books and stationery	94 70
Butter, 625 pounds	136 75
Eggs, 19,815 dozen	4,951 50
Gum, spruce, 366 pounds	109 10
Hats, straw, 300 dozen	190 00
Hay, 2,111⅝ tons	20,555 38
Horses, 9	1,058 00
Lumber, 594,592 feet	5,104 79
Machine, crochet, 1	20 00
Oats, 4,631 bushels	2,687 40
Potatoes, 4,014 bushels	1,966 75
Poultry, 50,121 pounds	4,719 45
Straw, 448¼ tons	1,826 25
Sundries	262 50
Total	50,912 15

WARREN A. WORDEN,
Commercial Agent.

SAINT JOHN'S AND AGENCIES.

(Agencies: Farnham and La Colle.)

SAINT. JOHN'S.

Quarter ending March 31.

Hay	$97,950 40
Horses	38,718 00
Oats	6,585 45
Potatoes	5,054 23
Peas	3,615 40
Straw	3,170 24
Eggs	3,100 29
Cord wood	2,375 00
Buckwheat	2,336 53
Lumber	1,800 60
Beans	661 75
Hemlock bark	606 00
Hop-poles	252 00
Sheep and lambs	240 00
Butter	208 80
Miscellaneous	894 85
Total	167,589 54

Quarter ending June 30, 1883.

Hay	$67,250 95
Horses	38,333 80
Lumber	9,439 80
Oats	8,379 09
Potatoes	3,230 62
Eggs	1,668 48
Cattle	1,589 50
Peas	1,122 20
Straw	789 50
Hemlock bark	726 00
Shingles	235 61
Miscellaneous	742 43
Total	133,508 06

SILAS P. HUBBELL,
Consul.

FARNHAM AGENCY.

Quarter ending June 30, 1883.

Hay	$25,651 97
Lumber	4,139 06
Horses	3,722 50
Hides	3,123 15
Eggs	1,364 13
Bark	1,026 00
Potatoes	454 25
Grain	347 50
Personal effects	345 00
Brick	30 00
Total	40,203 56

WM. L. HIBBARD,
Consular Agent.

SOREL.

Quarter ending March 31, 1883.

Bark, hemlock	$3,660 00
Beans	28 83
Buckwheat flour	27 00
Butter	10 00
Cotton waste (United States produce)	98 25
Eels, salted	33 00
Hay	2,055 58
Lumber	628 49
Personal effects	60 00
Potatoes	160 00
Sleigh	20 00
Total	6,771 15

HARRY P. DILL,
Commercial Agent.

Quarter ending June 30, 1883.

Bark	$870 00
Hay	5,967 64
Hemlock lumber	14,264 21
Miscellaneous	101 00
Oats	300 00
Household goods	200 00
Total	21,702 85

CHAS. A. RAND,
Commercial Agent.

STANBRIDGE.

Quarter ending March 31, 1883.

Bark, hemlock	$9,341 00
Beans	102 00
Butter	2,092 00
Coal	4,200 00
Cattle	1,181 00
Dairy skins	590 00
Hay, pressed	69,022 00
Horses	14,855 00
Hop-poles	1,063 00
Household goods	3,646 00
Hair	98 00
Lumber	7,571 00
Oats	2,193 00
Potatoes	795 00
Peas	718 00
Sundries	167 00
Wood	679 00
Total	119,313 00

Quarter ending June 30, 1883.

Bark, hemlock	$4,302
Brood mares	11,332
Coal, bituminous	6,5[illegible]
Cattle	1,924
Car-wheels	396
Dairy skins	15,189
Eggs	2,462
Hay	73,[illegible]
Horses	32,[illegible]
Household goods	2,48[illegible]
Lumber	10,637
Lambs	[illegible]
Total	163,2[illegible]

F. HARMON,
Commercial Agent.

THREE RIVERS.

Quarter ending June 30, 1883.

Bark, hemlock	$8,692
Bell metal	106
Cattle, horned	1,074
Extract of hemlock bark	7,470
Furs, undressed	1,[illegible]
Hair, moose	247
Harness	15
Hay	19,046
Horses	485
Household goods	343
Lumber	27,450
Laths	[illegible]
Mineral water	6
Posts, cedar	52
Railway ties	28,840
Shingles	9,3[illegible]
Straw	92
Wagon	50
Wet wood-pulp	[illegible]
Total	106,313

Quarter ending March 31, 1883.

Bark, hemlock	$3,004
Butter	113
Buckwheat	300
Extract hemlock bark	10,730
Furs, undressed	2,049
Fish, fresh	[illegible]
Hay	18,342
Horses	[illegible]
Household goods	[illegible]
Lumber	4,775
Leather	272
Potatoes	600
Shingles	3,563
Ties, railway	3,762
Total	48,340

JAMES M. WILSON,
Consul.

PROVINCE OF NOVA SCOTIA.

HALIFAX AND AGENCIES.

(Agencies: Barrington, Bridgewater, Liverpool, Shelburne.)

HALIFAX.

Quarter ending June 30, 1883.

Fresh fish	$6,946 25
Pickled fish	14,404 10
Dry fish	37 475 94
Canned lobsters	18,956 00
Cod oil	3,882 70
Manufactures of steel (chiefly skates)	24,247 14
Potatoes	14,961 83
Hides and skins	10,366 62
Old junk	3,241 41
Returned goods (chiefly whisky, $5,471.14)	7,405 64
Personal effects	2,118 00
Lumber	309 00
Eggs	740 39
Miscellaneous	2,105 00
Total	147,160 02

W. G. FRYE,
Consul-General.

PICTOU AND AGENCIES.

(Agencies: Cape Canso, Cow Bay, Glace Bay, Guysborough, Lingan, Louisburg, North Sydney, Port Hastings, and Port of Sydney.)

PICTOU.

Quarter ending March 31, 1883.

Horses	$1,877 50

Quarter ending June 30, 1883.

Coal, steam	$1,147 00
Coal, culm of	337 50
Calf skins	120 00
Freestone	800 00
Hair	455 00
Horses	1,186 00
Lobsters, canned	10,764 50
Personal effects	88 00
Potatoes	472 50
Slats	137 00
Total	15,507 50

E. JOHNSON,
Consul.

CAPE CANSO AGENCY.

Quarter ending June 30, 1883.

125,000 pounds Bank codfish	$3,750 00
2,450 cases canned lobsters	12,250 00
Total	16,000 00

THOS. C. COOK,
Consular Agent.

COW BAY AGENCY.

Quarter ending March 31, 1883.

574 tons of coal	$1,005 0

Quarter ending June 30, 1883.

8,053 tons coal	$10,661 0

CHARLES ARCHIBALD,
Consular Agent.

GLACE BAY AGENCY.

Quarter ending June 30, 1883.

4,162 tons culm of coal	$2,129 0

DAVID McKEEN,
Consular Agent.

GUYSBOROUGH AGENCY.

(No returns.)

LINGAN AGENCY.

(No returns.)

LOUISBURG AGENCY.

(No returns.)

NORTH SYDNEY AGENCY.

Quarter ending March 31, 1883.

Raw hides	$923 0
Junk and old canvas	480 0
729 tons coal	1,640 2
Total	3.043 2

Quarter ending June 30, 1883.

Raw hides	$355 0
Culm of coal	175 0
Total	530 00

W. PURVES,
Consular Agent.

PORT HASTINGS AGENCY.

Quarter ending June 30, 1883.

1,212 barrels herrings	$3,984 00
349 barrels mackerel	3,004 00
94½ barrels alewives	401 00
36 barrels cod-oil	900 00
Total	8,289 00

JAMES G. McKEEN,
Consular Agent.

PORT OF SYDNEY AGENCY.

Quarter ending June 30, 1883.

2,416 tons round coal	$4,837 00
4,371 tons culm coal	4,407 00
¾ tons copper ore	21 00
Total	9,265 00

F. E. LEAVER,
Consular Agent.

WINDSOR AND AGENCIES.

(Agencies: ———.)

WINDSOR.

Quarter ending June 30.

Gypsum	$30,765 56
Potatoes	190 00
Manganese	1,780 00
Hard-wood plank	438 50
Hemlock boards	565 00
Spruce boards	47 50
Total	33,786 56

D. K. HOBART,
Consul.

PROVINCE OF NEW BRUNSWICK.

SAINT JOHN AND AGENCIES.

Agencies: Frederickton, Grand Manan, McAdam Junction, Newcastle, St. Andrews, and St. George.)

SAINT JOHN.

Quarter ending March 31, 1883.

Fish	$15,918 58
Long lumber	12,919 96
Short lumber	5,956 50
Horses	9,533 01
Hides	10,882 42
Potatoes	1,106 50
Lime	1,027 05
Coal	720 00
Miscellaneous	7,291 28
Total	65,355 30

Export of American lumber for quarter ending March 31, 1883, under Revised Statutes of the United States:

Long lumber	57,265 43
Short lumber	12,342 34
Total	69,607 77

Quarter ending June 30, 1883.

Coal	$1,610 00
Hides	8,980 93
Horses	11,367 60
Fish	29,076 72
Kiln wood	2,803 75
Long lumber	18,444 19
Short lumber	30,436 62
Potatoes	9,380 92
Miscellaneous	8,714 22
Total	120,814 95

Exports of American lumber for quarter ending June 30, 1883, under Revised Statutes of the United States:

Long lumber	204,303 02
Short lumber	38,882 73
Total	243,185 75

D. B. WARNER,
Consul.

FREDERICTON AGENCY.

Quarter ending March 31, 1883.

8,547½ bushels potatoes	$5,146 50
1,500 cases canned beef	6,750 00
917 M shingles	1,834 00
Total	13,730 50

SPAFFORD BARKER,
Consular Agent.

GRAND MANAN AGENCY.

Quarter ending March 31.

Codfish, 156 quintals	$968 50
Herring (frozen), 979 M	8,564 62
Herring (smoked), 52,296 boxes	12,332 00
Pollock, 700 quintals	2,800 00
Total	24,665 12

W. F. ALEXANDER,
Consular Agent.

McADAM JUNCTION AGENCY.

Quarter ending March.

97½	tons antimony ore	$1,950 00
1,056	cords hemlock bark	4,301 00
310,591	pounds extract of hemlock bark	3,105 97
23,000	hoops	800 00
20,000	hoop poles	76 00
	Lot household goods	217 90
1	horse	100 00
11½	tons hay	117 00
20	tons ship-knees	190 00
7,823	bushels potatoes	4,203 11
802,500	shingles	1,567 25

NEWCASTLE AGENCY.

Quarter ending March 31, 1883.

Extract hemlock bark, 1,080 casks	$11,129 62

R. R. CALL,
Consular Agent.

SAINT ANDREWS AGENCY.

(No returns.)

SAINT GEORGE AGENCY.

Quarter ending March 31.

Red granite, 63 cases, polished	$728 50
Three horses	350 00
Total	1,078 50

BENJ. RANDALL,
Consular Agent.

SAINT STEPHEN.

Quarter ending March 31.

Hardware	$116 25
Household goods	650 00
Hoops	90 80
Horses	580 00
Molasses	2,109 51
Oats	749 50
Ship-knees	1,525 00
Salt	17 50
Skins and furs	993 00
Spruce poles	315 00
Total	7,146 56

PAUL LANGE,
Consul.

PROVINCE OF MANITOBA.

WINNIPEG AND AGENCY.

(Agency: Emerson.)

WINNIPEG.

Quarter ending March 31.

Fish, white	$2,136 00
Furs, undressed	3,595 25
Hides	11,744 42
Lamb coats	140 00
Locomotives (for repairs, to be returned)	110,000 00
Wheat, 19,849 bushels, in bond for export	16,987 72
Total	144,603 39

Quarter ending June 30, 1883.

Egg cases	$100 00
Empty beer casks	2,131 00
Furs, undressed	21,462 00
Hides	6,343 20
Miscellaneous	6,500 92
Total	36,537 12

JAS. W. TAYLOR,
Consul.

EMERSON AGENCY.

Quarter ending June 30, 1883.

In bond for export:		
Wheat, 12,954 bushels		$10,133 00
For duty:		
Stock	$2,180 00	
Miscellaneous	675 50	
		2,855 50
Free:		
Stock	2,967 00	
Miscellaneous	4,440 00	
		7,407 00
Total		20,395 50

Quarter ending March 31, 1883.

For duty:		
Stock	$1,475 50	
Miscellaneous	98 50	
		$1,573 00
In bond for export:		
Wheat, 70,397 bushels	60,286 00	
Flour, 200 sacks	615 00	
		60,901 00
Free:		
Stock	100 00	
Hides	360 00	
		460 00
Total		62,944 00

C. S. DOUGLAS,
Consular Agent.

PROVINCE OF BRITISH COLUMBIA.

(No returns.)

PROVINCE OF PRINCE EDWARD ISLAND.

(No returns.)

NEWFOUNDLAND.

(No returns.)

MEXICO.

ACAPULCO AND AGENCY.

(Agency: Tehuantepec.)

ACAPULCO.

Quarter ending March 31, 1883.

Green fruit, 3,160 packages	$10,703 24
Goat-skins, 10 bales, 2,527 pounds	361 10
Deer-skins, 25 bales, 8,811 pounds	2,515 90
Sweetmeats, 2 boxes	11 00
Total	13,504 24

Quarter ending June 30, 1883.

5226 packages fruit	$18,010 95
5 bales goat-skins	88 50
Total	18,099 45

JOHN A. SUTTER, Jr.,
Consul.

TEHUANTEPEC AGENCY.

Quarter ending March 31, 1883.

Cattle-hides, 4,332 pieces	$12,777 30
Calf-skins, 27 packages	696 51
Deer-skins, 12 packages	780 97
Ores, 5 packages	....
Specie, 2 boxes	4,000 00
India-rubber, 2 boxes	157 00
Total	18,411 78

Quarter ending June 30, 1883.

Cattle-hides, 2,955 pieces	$8,676 50
Calf-skins, 60 packages	2,104 32
Deer-skins, 5 packages	362 75
India-rubber, 1 package	160 00
Coffee, 50 bags	825 00
Specie, 3 boxes	3,000 00
Total	15,128 57

ALB. LANGNER,
Consular Agent.

CHIHUAHUA AND AGENCIES.

(No returns.)

GUAYMAS.

Quarter ending March 31, 1883.

Hides, 2,763	$6,017 80
12 sacks seeds, 27 bundles sugar-cane	65 38
4 boxes tomatoes	7 50
13¾ dozen hats, 2 barrels crockery, and 5 bundles crockery	125 75
86 sacks silver ore	1,807 50
200 bags silver ore	1,104 80
Total	9,128 73

Quarter ending June 30, 1883.

1,974 hides	$4,853 40
1 case deer-skins	15 00
1 case, 2 pieces, old machinery	42 50
15 packages dates	100 00
13 tons salt	134 50
2,529 head cattle	31,999 70
120 head sheep	120 00
18 head Mexican mares	306 00
10 stamp stems	254 50
47 packages merchandise in transit to Chihuahua	452 00
Total	38,277 60

A. WILLARD,
Consul.

GUERRERO.

Quarter ending March 31.

Horses and mules	$4,564 87
Beeves	21,131 26
Beef-hides, goat, kid, and deer skins	7,257 96
Total	33,054 09

Quarter ending June 30, 1883.

Horses, mares, and mules	$2,165 22
Beef-hides, goat, kid, and deer skins	5,942 06
Beeves	331 54
Total	8,438 82

CHARLES WINSLOW,
Vice-Consul.

LA PAZ.

Quarter ending March 31.

Pearls	$3,610 00
1,381 green hides	3,023 25
160 pounds cheese	40 90
258.99 orchilla weed	1,037 00
422 deer-skins	314 50
107 pounds human bones	52 50
Total	8,078 15

Quarter ending June 30.

Pearls	$9,912 50
1,227 green hides	2,585 00
475 deer-skins	368 50
Mother-of-pearl shell	1,893 50
100 orchilla weed	400 00
Total	15,159 50

JAS. VIOSCA,
Consul.

MANZANILLO.

(No returns.)

MATAMOROS AND AGENCIES.

(No returns.)

MAZATLAN.

Quarter ending June 30, 1883.

Bullion and specie	$839, 879 50
Brazil-wood	16, 682 50
Hides	3, 272 73
Jewelry	10, 305 00
Miscellaneous	1, 174 21
Total	871, 313 94

EDWARD G. KELTON,
Consul.

MERIDA AND AGENCY.

(No returns.)

MEXICO.

(No returns.)

MONTEREY.

Quarter ending June 30, 1883.

Ten tons assorted ores (for test)	No value.

ROBERT C. CAMPBELL,
Consul.

NUEVO LAREDO AND AGENCY.

(Agency: Garita Gonzales.)

NUEVO LAREDO.

Quarter ending March 31, 1883.

Corn, 10,500 pounds	$140 81
Beans, 222,835 pounds	8, 143 90
Bullion, 1,275 ounces	1, 139 85
Hides and skins, 525,834 pounds	120, 848 40
Istle, 39,852 pounds	4, 196 33
Lead, 526,469 pounds	12, 136 25
Live stock, 5,916 head	44, 435 29
Mexican dollars, 192,000	171, 648 00
Piloncillo, 208,770 pounds	11, 475 38
Red pepper, 6,099 pounds	2, 442 22
Miscellaneous	10, 114 70
Total	396, 721 02

Quarter ending June 30, 1883.

Beans	$5, 182 16
Bullion	1, 383 00
Hides and skins	86, 459 54
Istle	3, 984 06
Lead	6, 827 96
Live stock	24, 413 67
Mexican dollars	16, 876 00
Miscellaneous	8, 466 25
Piloncillo	13, 387 53
Red pepper	2, 337 52
Silver ore	191 74
Total	168, 449 73

STEPHEN H. SMITH,
Consul.

PASO DEL NORTE.

(No returns.)

PIEDRAS NEGRAS.

Quarter ending March 31, 1883.

Beans	$618 62
Corn	833 80
Cattle	16,049 43
Horses, mules	18,531 74
Hides, skins	3,292 17
Miscellaneous	1,053 69
Total	41,379 45

Quarter ending June 30, 1883.

Beans	$99 47
Piloncillo	1 32
Horses, mules	16,081 67
Hides, skins	1,701 43
Miscellaneous	1,102 22
Total	18,986 11

WM. SCHUCHARDT,
Late Vice-Consul.

PRESIDIO DEL NORTE.

(No returns.)

SALTILLO.

Quarter ending June 30, 1883.

Horses and colts; Mexican coin	$2,053 04

United States gold at 15 per cent. premium.

J. W. WADSWORTH,
Consul.

SAN BLAS.

(No returns.)

SAN JOSÉ.

(No returns.)

SAN LUIS POTOSI.

(No returns.)

TAMPICO.

Quarter ending June 30, 1883.

Istle	$15,986 60
Fustic	15,422 80
Hides	5,453 97
Sarsaparilla	4,008 69
Goat-skins	1,691 10
Honey	1,540 00
Jalap	1,156 00
Deer-skins	1,144 60
Horsehair	749 00
Rubber	180 00
Hule	63 26
Fruit	220 00
Total	47,616 02

AUGUSTUS J. CASSARD,
Consul.

TUXPAN.

Quarter ending March 31, 1883.

Chicle	$42,514 55
Cedar	15,273 46
Vanilla	13,136 [illegible]
Honey	13,115 84
Hides	4,011 [illegible]
Rubber	4,178 95
Deer-skins	1,958 79
Specie	2,015 00
Fustic	1,649 79
Molasses	215 86
Sarsaparilla, $114.80; fruit, $297.25	412 05
Miscellaneous	3 00
Total	98,537 25

J. J. THIBAULT,
Vice-Consul.

VERA CRUZ AND AGENCIES.

(Agencies: Coatzacoalcos, Frontera, and Minatitlan.)

VERA CRUZ.

Quarter ending March 31, 1883.

Coffee	$360,729 13
Goat-skins	257,970 10
Salt, dry, and wet hides	62,510 63
Deer-skins	5,319 77
Broom root	11,625 50
Rubber	28,971 49
Jalap	1,515 44
Fustic	10,767 57
Cigars	8,729 04
Nickel coin	57,070 52
Sugar	882 95
Tobacco	781 56
Saffron	91 91
Istle	39 67
Earthenware	23 32
Household furniture and books	913 13
Minerals	715 42
Rice	400 00
Cacao	400 00
Chocolate	100 00
Mats for baling coffee	430 97
Zacaton	799 60
Marble	2,207 06
Printed matters	104 55
Shoes	250 00
Feathers	1,381 22
Bones	2,425 15
Miscellaneous	1,510 00
Total	818,723 40

Quarter ending June 30, 1883.

Bank shares	$4,000 00
Books and furniture	1,806 75
Chocolate	42 40
Cigars	7,203 32
Coffee	255,334 45
Deer-skins	4,771 13
Dry hides	52,559 92
Essences	127 66

Feathers	$465 38
Fustic	6,018 30
Flowers (dye flowers)	7,331 81
Goat-skins	103,490 21
Istle	6 49
Jalap	1,145 95
Mexican curiosities	333 21
Mineral	885 57
Rubber	17,902 68
Sacks	102 34
Sugar	256 25
Tobacco	1,989 47
Vanilla	171,199 14
Wine	25 00
Zacaton	13,078 35
	650,174 28

BRUNO TZSCHUCK,
Consul.

FRONTERA AGENCY.

Quarter ending June 30, 1883.

Mahogany	$44,191 97
Logwood	785 70
Hides	9,950 22
Deer-skins	1,613 80
Tobacco	2,597 61
Specie	400 00
Indigo	1,443 22
Coffee	1,410 10
Total	62,392 62

M. GIRARD.
Consular Agent.

CENTRAL AMERICA.

COSTA RICA.

SAN JOSÉ AND AGENCIES.

(No return.)

GUATEMALA.

GUATEMALA AND AGENCIES.

(Agencies: Champerico, Coban, Izabel, Livingston, and San José.)

GUATEMALA.

Quarter ending March 31, 1883.

Beans	$425 00
Cochineal	608 03
Coffee	44,884 70
Deer-skins	981 27
Goat-skins	60 71
Hides, dry	11,340 99
India rubber	15,462 79
Stationery	66 67
Sugar	12,697 38
Tobacco	42 99
Total	86,569 93

Quarter ending June 30, 1883.

Cacao	$848 6[illegible]
Chocolate	25 [illegible]
Coffee	61,038 [illegible]
Deer-skins	1,873 75
Goat-skins	58 35
Hides	19,930 04
Miscellaneous	25 42
Personal effects	250 [illegible]
Rubber	27,324 53
Silverware	1,555 61
Specimens	166 65
Sugar	6,338 55
Total	119,434 96

FRANK H. TITUS.

CHAMPERICO AGENCY.

Quarter ending March 31, 1883.

Coffee	$279,556 56
India rubber	5,885 [illegible]
Hides	603 36
Total	286,045 [illegible]

Quarter ending June 30, 1883.

Coffee	$164,487 73
India rubber	777 25
Hides	3,133 44
Cocoa	30 00
Merchandise	16 00
Total	168,444 51

Y. SOUZA,
Consular Agent.

LIVINGSTON AGENCY.

Quarter ending March 31, 1883.

Coffee	$29,968 54
Rubber	433 22
Hides	1,935 60
Ore	12,800 00
Indigo	1,742 00
Bananas	2,767 02
Sarsaparilla	1,908 51
Mahogany	1,778 23
Plants	47 22
Plantains	6 60
Cocoanuts	40 00
Total	53,428 21

WILLIAM OWEN,
Acting Consular Agent.

Quarter ending June 30.

Coffee, 462,653 pounds	$35,811 95
Rubber, 6,922 pounds	2,793 27
Sarsaparilla, 7,341 pounds	1,328 94
Hides, 16,505 pounds	1,573 12
Mahogany, 41,530 feet	2,649 91
Deer-skins, 520 pounds	102 40
Plants, 160 pounds	6 40
Bird-skins	19 50
Fruits	1,596 80
Total	45,882 73

JAS. F. SARG,
Consular Agent.

SAN JOSÉ DE GUATEMALA AGENCY.

Quarter ending June 30, 1883.

Coffee	$96,197 85
Hides	638 94
India rubber	3,087 25
Sugar	15,868 46
Total	115,792 50

JOHN STUART,
Consular Agent.

HONDURAS.

AMAPALA.

(No returns.)

RUATAN AND TRUXILLO AND AGENCIES.

(Agencies: Bonacca, Puerta Cortez, San Pedro Sula, Truxillo, and Utilla.)

RUATAN AND TRUXILLO.

Quarter ending March 31, 1883.

Sarsaparilla, $5,864; hides, $9,762	$15,626 00
Deer-skins, $5,816; goat and tiger skins, $455	6,271 00
Mahogany and cedar	2,785 00
Cocoanuts	12,373 00
Bananas	17,815 00
Old copper	180 00
Oranges, pineapples, plantains, &c	1,974 00
Shells	85 00
From Utilla:	
Bananas and other fruit	4,865 00
Cocoanuts	8,320 00
Mahogany	262 00
Total	70,556 00

Quarter ending September 30, 1882.

From Rúatan and Bonacca:	
Bananas and other fruit	$16,890 00
Cocoanuts	34,050 00
From the Island of Utilla;	
Bananas and other fruit	3,715 00
Cocoanuts	18,360 00
From Truxillo:	
Cocoanuts	3,160 00
Hides and skins	3,689 00
Sarsparilla	7,148 00
India rubber	2,018 00
Total	88,960 00

WM. C. BURCHARD,
Consul.

BRITISH HONDURAS.

BELIZE.

Quarter ending June 30, 1883.

Sugar	$46,565 3
Fruit, nuts, &c	19,128 7
India rubber	11,469 3
Hides	1,151 4
Sarsaparilla	895 1
Logwood	862 9
Deer-skins	56 8
Lignumvitæ	100 5
Old copper	116 7
Total	80,346 8
Ginghams returned to United States	149 0
Matting returned	36 1
	185 17

ALBERT E. MORLAN,
Consul.

NICARAGUA.

SAN JUAN DEL NORTE AND PUNTA ARENA AND AGENCY

(No returns.)

SAN JUAN DEL SUR.

(No returns.)

SALVADOR.

LA UNION.

Quarter ending March 31, 1883.

92 bales rubber, 22,166 pounds	$6,649 8
104 seroons Indigo, 16,044 pounds	16,044 0
1,841 dry hides, 35,309 pounds	4,944 2
28 bales deer-skins, 5,465 pounds	1,630 5
1 bale alligator hides, 354 pounds	106 2
35 sacks silver ore, 3,282 pounds	2,800 0
2 cases raw silver	1,256 5
Total	33,431 2

Quarter ending June 30, 1883.

70 sacks coffee, 10,500 pounds	$1,050 0
26 bales deer-skins, 5,399 pounds	1,619 7
1,836 dry hides, 31,768 pounds	4,447 5
53 bales rubber, 12,640 pounds	3,792 0
777 sacks silver ore, 189,075 pounds	20,400 0
Total	31,309 2

EMILO COURTADE,
Consul.

SOUTH AMERICA.

UNITED STATES OF COLOMBIA.

BARRANQUILLA AND AGENCIES.

(Agencies: Rio Hacha and Santa Martha.)

BARRANQUILLA.

Quarter ending March 31, 1883.

Hides	$38,881	63
Coffee	35,319	46
Quina	22,286	84
Fustic	3,911	72
India rubber	1,924	17
Balsam	1,518	27
Straw hats	473	22
Goat-skins	193	40
Emeralds	144	02
Total	104,652	73

Quarter ending June 30, 1883.

Hides	$226,177	57
Coffee	190,438	96
Quina	79,692	88
Fustic	6,018	32
India rubber	14,222	96
Balsam	737	76
Deer-skins	246	96
Goat-skins	2,323	36
Emerald	264	69
Cigars	246	90
Dividivi	134	74
Ivory nuts	740	46
Plants	115	22
Anato	113	68
Total costs	7,449	82
Total	528,702	28
Treasure, including gold, silver, gold dust, exported to the United States without invoice	22,369	79
Total	551,072	07

THOMAS M. DAWSON,
Consul.

RIO HACHA AGENCY.

Quarter ending March 31, 1883.

Goat-skins	$9,710	70
Hides	8,471	50
Deer-skins	224	75
Bones	2,547	05
Coffee	487	20
Horns	71	50
Porcupine skins	23	35
Tiger skins	5	70
Total	21,541	75

Quarter ending June 30, 1883.

Goat-skins	$7,435	00
Hides	5,666	09
Bones	3,678	52
Deer-skins	421	91
Coffee	609	00
Woods	962	22
Total	18,772	74

PV. CLARIQUER,
Consular Agent.

COLON.

Quarter ending March 31, 1883.

Bananas	$68,789 6[illegible]
Ivory nuts	505 [illegible]
Cocoanuts	10,609 [illegible]
India rubber	1,353 [illegible]
Tortoise shell	3,010 5[illegible]
Old metal	650 5[illegible]
Coffee	857 [illegible]
Hides	152 5[illegible]
Sundries	5,236 [illegible]
Total	91,165 67

Quarter ending June 30, 1883.

Bananas	$100,373 74
Ivory nuts	2,792 17
Rubber	6,231 85
Hides	2,933 9[illegible]
Cocoanuts	15,994 54
Tortoise shell	623 15
Cocoa	111 70
Rock ore	30 00
Coffee	2,943 50
Sundries	13,084 32
Total	145,119 15

F. W. RICE,
Consul.

PANAMA.

Fractional quarter ending June 30, 1883.

Rubber	$55,742 64
Hides	12,030 11
Cocobolo wood	3,975 40
Skins	3,838 90
Coffee	2,270 5[illegible]
Straw hats	916 65
Ivory nuts	613 44
Cocoa	341 [illegible]
Total	79,729 1[illegible]

THOMAS ADAMSON,
Consul.

VENEZUELA.

LAGUAYRA.

Quarter ending March 31, 1883.

Coffee	$257,276 1[illegible]
Cocoa	12,694 [illegible]
Hides	27,020 45
Skins	23,538 4[illegible]
Miscellaneous	1,534 [illegible]
Total	322,063 [illegible]

Quarter ending June 30, 1883.

Coffee	$240,954 [illegible]
Cocoa	10,452 1[illegible]
Skins	36,21[illegible] [illegible]
Hides	11,741 [illegible]
Miscellaneous	1,327 [illegible]
Total	300,700 3[illegible]

WINFIELD S. BIRD,
Consul.

MARACAIBO AND AGENCIES.

(Agencies: Coro, San Cristobal, and Valera.)

MARACAIBO.

Quarter ending March 31, 1883.

Coffee	$546,046	74
Cacao	2,050	61
Hides	27,306	08
Skins	21,218	93
Copaiba	8,437	68
Quina bark	1,565	77
Fish sounds	9,737	44
Sugar	5,767	38
Fustic	2,454	68
Lignumvitæ	388	46
Brazil wood	673	59
Bones	307	69
Horns	60	73
Divi-divi	2,609	53
Wool	226	77
Living plants	595	92
Total	629,448	00

Quarter ending June 30, 1883.

Coffee, 8,409,052 pounds	$1,122,289	16
Cacao, 55,232 pounds	17,834	94
Hides, 208,526 pounds	49,986	44
Skins, 57,142 pounds	28,123	57
Balsam copaiba, 27,420 pounds	13,226	68
Quina bark, 5,340 pounds	2,648	59
Fish sounds, 5,581 pounds	4,335	10
Fustic, 901,948 pounds	7,127	12
Zapatera wood, 17,000 pounds	851	83
Divi-divi, 134,675 pounds	3,229	89
Bones, 32,000 pounds	263	60
Paradies seed, 200 pounds	52	40
Brazil wood, 4,435 pounds	229	25
Total	1,250,198	57

E. H. PLUMACHER,
Consul.

CORO AGENCY.

Quarter ending March 31, 1883.

Goat-skins	$74,401	42
Coffee	10,940	66
Total	85,342	08

RAYMON SEIGAS,
Consular Agent.

Quarter ending June 30, 1883.

Goat-skins	$70,139	93
Coffee	35,488	26
Total	105,628	19

M. A. LARACY,
Consular Agent ad interi

PUERTO CABELLO.

Quarter ending March 31, 1883.

3,838,797	pounds coffee	$314,464 03
11,440	hides, weighing 261,124 pounds	48,468 37
6,987	deer-skins, weighing 16,036 pounds	5,943 65
9,018	goat-skins, weighing 15,575 pounds	6,944 04
42,170	pounds cocoa	7,101 41
24,578	pounds divi-divi	582 95
5,154	pounds quina bark	560 00
95	pounds deer-horns	14 40
45	pounds concha shells	12 00
4,895	pounds rope	480 00
1,000	pounds old copper	80 00
3	boxes old types	20 00
	Total	384,670 90

RICHARD KOLSTER,
Vice-Consul.

Quarter ending June 30, 1883.

1,947,032	pounds coffee	$184,601 92
5,293	hides, weighing 114,343 pounds	19,678 60
11,184	deer-skins, weighing 26,098 pounds	9,213 17
12,155	goat-skins, weighing 21,532 pounds	9,583 51
1,650	pounds cocoa	437 60
12,592	pounds divi-divi	229 10
3,474	pounds quina bark	373 93
10,790	pounds sugar	492 95
2,503	pounds old copper	293 29
	Total	224,904 08

I. HURUP,
Acting Consul.

DUTCH GUIANA.

PARAMARIBO.

Quarter ending March 31, 1883.

Sugar	$55,477 62
Cacao	66,664 22
Molasses	8,703 14
Coffee	46 66
Pickled limes	104 75
Lime juice	85 21
One barrel vegetables	1 54
Gold dust	6,153 49
Total	137,236 93

Quarter ending June 30, 1883.

Sugar	$32,794 55
Cacao	134,450 66
Molasses	5,171 37
Pickled limes	135 22
Lime juice	125 42
Gold dust	13,950 57
Old iron	2,502 50
Total	189,130 61

HENRY BARNETT,
Vice-Consul.

BRITISH GUIANA.

DEMERARA.

Quarter ending March 31, 1883.

Sugar	$1,809,903	54
Molasses	7,574	86
Gum	1,302	99
Ballata	393	94
Copper	504	04
Brass	381	82
Lead	72	38
Yellow metal	110	11
Bird skins	52	25
Tonka beans	15	65
Total	1,820,311	58

PH. FIGYELMESY,
Consul.

BRAZIL.

BAHIA.

Quarter ending June 30, 1883.

Sugar	$701,149	70
Carbonates	11,155	46
Rubber	6,034	26
Jacoranda	6,586	91
Bird skins	1,201	83
Poisoned skins	51	56
Total	726,179	72

JOHN B. WEAVER,
Consul.

PARA.

Quarter ending March 31, 1883.

Balsam copaiba	$1,152	00
Cream nuts	14,943	00
Cocoa	2,700	00
Deer-skins	17,114	00
India rubber	1,601,160	00
Ox hides	4,195	00
Old metal	781	00
Tonka beans	13,559	00
Total	1,655,604	00

Quarter ending June 30, 1883.

Annatto	$1,870	00
Balsam copabia	5,570	00
Brazil nuts	59,190	00
Deer skins	31,429	00
India rubber	1,855,390	00
Ox hides	10,825	00
Peruvian bark	53,390	00
Tonka beans	1,710	00
Miscellaneous	770	00
Total	2,020,144	00

A. C. PRINDLE,
Consul.

PERNAMBUCO.

Quarter ending March 31, 1883.

Sugar, 207,037 bags	$1,098,491 42
Sheep-skins, 11 bales	863 75
Goat-skins, 27 bales	2,417 50
Total	1,101,772 67

Quarter ending June 30, 1883.

Sugar, 31,747 bags	$176,910 34
Old iron	2,545 27
Old iron scraps	561 00
Bones and horns	284 47
Raw sheep and goat skins	20,452 04
Total	200,753 12

HENRY L. ATHERTON,
Consul.

RIO DE JANEIRO.

Quarter ending March 31, 1883.

Coffee, 587,812 bags	$5,574,667 33
Rosewood, 1,329 logs	30,027 14
Rosewood, 616 half logs	9,487 37
Old iron, 255 tons, 3 cwt., 2 qrs	2,383 10
Fish glue, 14 bags	380 53
Wood, 6 cases	97 05
Sundries, 74 cases, 4 bales	789 01
Advertising material, 3 cases (re-exportation)	256 60
Total	5,618,088 13

Quarter ending June 30, 1883.

Coffee, 571,474 bags	$6,138,829 76
Rosewood, 466 logs	8,317 86
Medicinal plants, seeds, &c., 29 bales, 3 cases	273 73
Total	6,147,421 35

C. C. ANDREWS,
Consul General.

RIO GRANDE DO SUL.

Quarter ending March 31.

The past quarter can scarcely be looked on with satisfaction in commercial circles in the province of Rio Grande (Brazil), and complaints are rife of "bad business," bad payments, and general "falling off in trade."

As regards imports this is easily accounted for by the constantly increasing contraband over the frontier and excess of supply compared with demand, and with respect to exports to the very high export duties levied by the central and provincial governments, heavy cost of transport consequent on the unsatisfactory state of the bar, and also to the tenacity of the Pelotas Saladeristas in maintaining their absurd convention and pretensions to dictate conditions to shippers and producers, as distasteful and inconvenient to these as prejudicial to themselves.

IMPORTS.

From the United States only six vessels have arrived, and these all foreign flags, being four with flour, one with an assorted cargo, and one with six locomotives and tenders from Philadelphia for the French company that has the contract for the construction and working of the railway in the south of the province, a very significant proof of the superiority of American manufacture and adaptation to the speciality of traffic. The railway is not yet opened to the public, but the work is progressing and its completion eagerly looked forward to as a means of retrieving past losses and inaction.

Bar.—The Government committee of engineers, actually engaged in studying the best means for permanent improvement, are at work, and the thing looks like business, and not as hitherto mere talk.

Two powerful dredges have been ordered by the minister of agriculture, one from the United States, and one from France.

Tenders for steam-hoppers and other material are also called for. The head engineer is undoubtedly active and enterprising, and proposes to work day and night, employing the electric light whenever the state of the bar permits.

During the past six month, 759 craft of all classes crossed inward and outward without any serious accident.

Entries—Sailing vessels, 475; steamers, 176. Sailed—Sailing vessels, 475; steamers, 17.

Exports.—Entries have shown a falling off of 30,000 head of cattle in the Saladeros as compared with last season, which was one of the smallest on record.

The following have been declared at this consulate as destined for the United States:

Dry cattle-hides, 73,763	$260,709 02
Salted cattle-hides, 6,594	29,109 88
Wool, 245,391 kilograms	63,256 39
Horse-hair, 124,040 kilograms	54,262 48
Nutria-skins, 3 packages	468 80
Cattle-horns, 9,300	311 39
Horn piths, 7,695	75 15
Old metal, 3,661 kilograms	529 63
Total	408,722 74

The falling off in dry hides is notable, as in same period in 1882, 108,759 were shipped; in 1881, 145,971. This decrease can only be attributed to the small mortality amongst cattle in the camp, besides the quantity sent over the frontier.

The shipments of wool show an increase.

Quarter ending June 30.

In my last quarterly report of March 31, I remarked that it could scarcely be looked on with satisfaction in commercial circles, and I regret to have to apply the same observation to the quarter ended this day. A continued series of rainy weather has brought the season to a rather premature close, and if slaughter in the saladeros last year was exceptionally small, it is now even less by some 15,000, a fact which contributes much to the great stagnation in trade.

Imports from the United States have been limited to 3 cargoes of flour from Richmond, and 2 assorted cargoes, chiefly composed of lumber, kerosene, and rosin from New York. By steam I have noticed no arrivals, but several lots of American flour have come down in coasters from Rio de Janeiro. It is agreeable, however, to notice that two American vessels arrived during the quarter, both with rapid voyages, and good turn out of cargo. Owing to want of return cargo homeward, charters for the coast were accepted in each instance

From the table of comparative exports hence to the United States, it would seem that the retrograde movement is progressive, both in quality and value.

Undoubtedly various causes have had a baneful influence on the commerce of the province. To trace these causes to their primitive source is more than I could attempt in the circumscribed space of a quarterly report. But that the imperfect means of transport in the interior, high rates of freight, and exorbitant fiscal duties on both imports and exports, have much to do with the general depression is unquestionable.

Railways are progressing slowly, and the construction has been somewhat retarded lately by floods and heavy rains. Still, we are promised that the first section of the line hence to the frontier will be opened by the end of the year.

The Bar has been favorable and no casualties have occurred, nor have there been any cases of extraordinary detention to shipping. The Government engineers intrusted with the improvement and special study for projected works are waiting for the arrival of the dredgers, tow-boat, &c., mentioned in my last. Vessels should not load deeper than 9¼ feet for entry, 9¾ if outward bound.

Exports to the United States.

Dry cattle-hides, 47,833	$162,183	55
Wool, 43,578 kilograms	10,455	39
Horse-hair, 12,413 kilograms	6,700	12
Shin-bones, 235,684	2,006	90
Horns, 21,808	1,037	40
Fish-bladders, 34 bales	964	48
Old sheathing copper, 3,083 kilograms	449	95
Total	183,797	79

WM. A. PRELLER,
Vice-Consul.

SANTOS.

Quarter ending March 31, 1883.

Coffee, 51,982 bags, 60 kilograms each	$526,758	33

Quarter ending June 30, 1883.

Coffee, 56,273 bags	$711,498	97
Old iron rails, 3,099	7,286	02
Total	718,784	99

WM. T. WRIGHT,
Consul.

URUGUAY.

MONTEVIDEO.

Quarter ending June 30, 1883.

Dry hides, 64,293	$249,477	39
Wool, 660 bales	86,129	64
Bones, 1,718 tons	37,298	42
Wet salted hides, 1,999	11,350	67
Ostrich feathers, 18 cases	8,646	31
Hide cuttings, 49 bales	1,146	49
Horn piths, 19,613 kilograms	472	73
Shin-bones, 28,000	260	77
Hair, 21 bales	6,294	99
Nutria-skins, 3 bales	1,413	02
Shank-bones, 20,739 kilograms	499	20
Mare's grease, 1 cask	85	29
Total	403,074	92

A. L. RUSSELL,
Consul.

ARGENTINE REPUBLIC.

BUENOS AYRES.

Quarter ending March 31, 1883.

Dry hides and kips	$501,809	09
Wool	364,229	95
Goat-skins	147,729	22
Horse-hair	111,076	37
Nutria-skins	80,765	79
Salted hides	37,740	56
Feathers	36,261	22
Bones and bone ash	17,153	51
Old iron	14,927	09
Hide cuttings	5,746	41
Dried blood	5,173	47
Carpincho-skins	3,912	90
Horns and piths	500	00
Deer and stag skins	307	40
Total	1,327,383	07

Quarter ending June 30, 1883.

Wool	$562,565 46
Dry ox and cow hides and kips	401,009 34
Goat-skins	188,894 41
Horse-hair	93,418 70
Nutria-skins	61,844 34
Salted hides	30,191 75
Crushed bones	15,420 63
Bones	11,567 90
Carpincho-skins	12,824 59
Deer and stag skins	7,234 70
Cuttings	2,288 00
Ostrich feathers	1,501 04
Paper stock	292 77
Total	1,389,053 63

E. L. BAKER,
Consul.

ROSARIO AND AGENCIES.

(Agencies: Parana and Santa Fé.)

ROSARIO.

Quarter ending March 31, 1883.

Dry hides and kips, 30,720	$109,625 32
Goat-skins, 30 bales	13,517 06
Hair, 47 bales	10,397 14
Nutria-skins, 9 bales	3,528 64
Carpincho-skins, 2 bales	438 12
Total	137,506 28

ALANSON S. HALL,
Vice-Consul.

CHILI.

(No returns.)

BOLIVIA.

(No returns.)

PERU.

CALLAO.

Quarter ending June 30, 1883.

Paintings, &c	$4,000 00
Antiquities	1,100 00
Hides	330 00
Cocoa leaves	284 96
Total	5,714 96

J. H. MOORE,
Consul.

LAMBAYEQUE.

Quarter ending June 30, 1883.

Dry hides	$498 20

ALFRED LAPOINT,
Vice-Consul.

IQUIQUE.

Quarter ending June 30, 1883.

Nitrate of soda	$547,859	[illegible]
Borate of lime	664	[illegible]
Iodine	14,440	[illegible]
Scrap iron	5,948	[illegible]
Empty quicksilver flasks	158	[illegible]
Total	569,072	45

J. W. MERRIAM,
Consul.

ECUADOR.

GUAYAQUIL.

Quarter ending June 30, 1883.

Rubber	$59,308	61
Cocoa	48,523	58
Cascarilla	772	50
Specie	509	52
Hides	17,174	72
Deers-kins	174	71
Total	126,463	96

A. DESTRUGE,
Vice-Consul.

THE WEST INDIES.

BRITISH WEST INDIES.

1. Bahamas.
2. Bermuda.
3. Turk's Islands.
4. Jamaica.
5. St. Lucia.
6. Virgin Islands.
7. St. Christopher.
8. Nevis.
9. Antigua.
10. Monserrat.
11. Dominica.
12. St. Vincent.
13. Barbadoes.
14. Grenada.
15. Tobago.
16. Trinidad.

THE BAHAMAS.

NASSAU AND AGENCIES.

(Agencies: Dunmore Town, Governor's Harbor, Green Turtle Cay, and Mathewtown.)

NASSAU.

Quarter ending March 31, 1883.

Sponges	$46,408	36
Fruit	1,530	41
Old metal and junk	467	20
Rawhides	317	42
Sundries	738	22
Total	49,462	[illegible]

Quarter ending June 30, 1883.

Sponges	$29,328	65
Pineapples	939	21
Salt	172	25
Raw hides	250	00
Sundries	900	05
Total	31,599	15

THOS. J. McLAIN, Jr.,
Consul.

DUNMORE TOWN AGENCY.

Quarter ending March 31, 1883.

Pineapples	$16 70
Bananas	499 50
Cocoanuts	94 00
Grape fruit	2 00
Limes	2 00
Oranges	278 30
Shells, common conch	10 00
Sugar-canes	4 00
Shells, Queen conch	4 80
Sapodillas	18 60
Tomatoes	89 50
Watermelons	1 50
Yams	6 00
Total	1,026 90

Quarter ending June 30, 1883.

Pineapples	$5,760 00
Bananas	107 00
Cocoanuts	10 00
Grape fruit	3 60
Limes	3 00
Lilies	21 00
Oranges	3 00
Sapodillas	7 50
Old junk	9 50
Shells, Queen conch	16 20
Tomatoes	51 60
Watermelons	4 80
Total	5,997 20

HENRY S. HIGGS,
Consular Agent.

GOVERNOR'S HARBOR AGENCY.

Quarter ending March 31, 1883.

Salt, bananas, and shells	$283 22

Quarter ending June 30, 1883.

Pineapples and shells	$47,249 29

CHAS. A. BETHEL,
Consular Agent.

GREEN TURTLE BAY AGENCY.

Quarter ending March 31, 1883.

Oranges	$1,830 00
Bananas	284 00
Coral	9 75
Sea fans	10 00
Conch shells	36 50
Sponge	4 50
Limes	2 00
Grape fruit	1 20
Pineapples	2 42
Star-fish	35 00
Pumpkins	23 00
Yams	4 40
Total	2,242 77

Quarter ending June 30, 1883.

Pineapples, quantities unknown.

Coral	$5 00
Star-fish	1 75
Shells	2 75
Lilies	5 15
Lemons	50
Old junk	6 00
Total	21 15

URIAH SAUNDEBS.

MATHEWTOWN AGENCY.

Quarter ending March 31, 1883.

Guano, or cave earth	$750 00
General cargo ex S. S. Athos, wrecked at Inagua on December 6, and returned to the United States in schooner A. L. Butler, and no invoice taken of same	38,000 00
Total	38,750 00

J. I. SARGENT,
Consular Agent.

BERMUDA.

HAMILTON.

Quarter ending March 31, 1883.

Liquors	$115,477 94
Vegetables	44,109 93
Old metal	177 15
Total	159,765 02

Quarter ending June 30, 1883.

Vegetables	$378,681 98
Liquors	76,192 25
Varnish, shellac	2,887 80
Old metal	367 70
Mineral salt	137 12
Empty casks	43 32
Arrowroot	551 59
Mineral water	298 07
Total	459,159 83

CHAS. M. ALLEN,
Consul.

ANTIGUA AND AGENCIES.

(Agencies: Anguilla, Dominica, Montserrat, Nevis, and Portsmouth.)

ANTIGUA.

Quarter ending March 31, 1883.

Sugar	$11,685 25
Molasses	429 49
Hides and skins	297 51
Turtle shell	114 00
Butter (returned to the United States)	113 45
Total	12,649 70

Quarter ending June 30, 1883.

Sugar	$230,236 27
Molasses	20,033 17
Hides, skins, and beeswax	444 90
Total	250,714 34

CHESTER E. JACKSON,
Consul.

ANGUILLA AGENCY.

Quarter ending March 31, 1883.

19,695 bushels coarse salt	$1,583 10

WAGER REY,
Consular Agent.

DOMINICA AGENCY.

Quarter ending March 31, 1883.

Muscovado sugar	$8,995 99
Concentrated lime-juice	2,782 08
Cocoa	1,896 57
Laurel leaves	1,189 09
Fruit	106 82
Old metal	94 94
Coffee	90 14
Cocoa-nuts	86 28
Cassia	26 92
Total	15,268 83

Quarter ending June 30, 1883.

Muscovado sugar	$39,159 92
Concentrated lime juice	670 24
Bay leaves	520 75
Bay oil	165 00
Cocoa	116 90
Cassia	106 70
Lime fruit	93 55
Oil of limes	57 83
Tamarinds	35 60
Total	40,926 49

WM. STEDMAN,
Consular Agent.

MONTSERRAT AGENCY.

Quarter ending March 31, 1883.

Concentrated lime juice	$7,984 00
Fruit	50 14
Molasses	678 58
Total	8,712 72

WILLIAM A. THURMAN,
Acting Consular Agent.

NEVIS AGENCY.

Quarter ending March 31, 1883.

85 barrels Muscovado sugar	$757 71
20 barrels Muscovado sugar	183 95
Total	941 66

Quarter ending June 30, 1883.

102 barrels Muscovado sugar, 25,720 pounds	$898 67
22 barrels Muscovado sugar, 5,945 pounds	212 09
Total	1,110 76

H. R. CHALLENOR,
Consular Agent.

BARBADOES AND AGENCIES.

BARBADOES.

Quarter ending March 31, 1883.

Old metal	$77 42
Skins	844 68
Samples	29 46
Sugar and molasses	41,289 23
Total	42,240 79

Quarter ending June 30, 1883.

Aloes	$504 95
Arrowroot	1,984 24
Ale kegs	39 80
Cassava	132 00
Old metal	343 32
Old rag	13 84
Skins	859 34
Sugar and molasses	1,329,112 74
Yams	2 25
Total	1,332,861 80

ROBT. Y. HOLLEY,
Consul.

JAMAICA.

KINGSTON AND AGENCIES.

(Agencies: Falmouth, Milk River, Montego Bay, Port Antonio, Savannah-la-Mar, and St. Ann's Bay.)

KINGSTON.

Quarter ending March 31, 1883.

Annotto	$2,865 31
Bananas	6,493 95
Bitterwood	94 89
Coffee	37,135 31
Ginger	1,226 28
Hides and skins	1,880 43
Logwood	132 12
Miscellaneous and drugs	3,754 43
Old metal	3,375 93
Oranges	36,594 37
Pimento	218 81
Preserved fruit	1,471 70
Rum	1,314 96
Sticks	919 07
Sugar	17,213 78
Total	114,691 34
Corresponding quarter 1882	152,881 50
Decrease	38,190 16

Quarter ending June 30, 1883.

Annatto	$1,112 03
Bananas	20,823 42
Coffee	22,186 18
Ginger	3,311 53
Hides and skins	1,412 69
Miscellaneous	1,371 06
Oranges	5,248 10
Pimento	4,582 67
Pineapples	2,958 58
Rum	805 03
Sticks	1,252 28
Sugar	51,530 10
Old metal	702 53
Total	117,296 20
Corresponding quarter 1882	116,888 72
Increase	407 48

GEO. E. HOSKINSON,
Consul.

Quarter ending June 30, 1883.

PORT ANTONIO AGENCY.

Bananas, 127,816 bunches	$74,627 00
Cocoa-nuts, 204,000	4,459 00
Limes, 29 barrels	72 50
Lime juice, 6 puncheons	512 00
Oranges, 70 barrels, 108 boxes	52 00
Total	79,722 50

MONTEGO BAY AGENCY.

Annotto		$196 55
Fruit, viz: Bananas	$3,411 35	
Oranges	21 89	
Pineapples	6 07	
		3,439 31
Goat skins		63 61
Ginger (dried)		1,190 25
Hides		66 56
Old metal		31 69
Pimento		21 52
Sugar		28,419 53
Total		33,429 02

ST. ANN'S BAY AGENCY.

Sugar	$14,077 85
Pimento	40,882 95
Bananas	1,625 71
Oranges	1,021 59
Ginger	1,706 19
Logwood	68 82
Pineapples	9 11
Molasses	36 49
Fustic	43 78
Satinwood	24 33
Orange juice	389 32
Lime juice	24 32
Total	59,910 46

MILK RIVER AGENCY.

Oranges	$5,885 20
Coffee	5,083 98
Total	10,969 18

FALMOUTH AGENCY.

The value of all exports to the United States during the quarter was, $39,197.65, and consisted of sugar, 331 hogsheads, 394 barrels; pimento, 88 bags; ginger, coffee, and sundries.

SAVANNAH LA MAR AGENCY.

Fruit, bananas	$550 00
Annotto	55 61
Total	605 61

RECAPITULATION OF KINGSTON AND AGENCIES.

Kingston	$117,206 90
Port Antonio	79,722 50
Montego Bay	33,429 02
St. Ann's Bay	59,910 46
Milk River	10,969 15
Falmouth	39,197 65
Sav. la Mar	605 61
Total	341,120 62

TRINIDAD.

Quarter ending March 31, 1883.

Asphalt	$26,146 35
Empty lager beer kegs	167 50
Cocoa	80,714 20
Bitters	13,740 20
Hides	372 60
Cocoa-nuts	15,046 12
Tonka beans	1,743 10
Carboys	82 00
Wool	193 00
Sugar	190,731 75
Molasses	141 10
Old iron	1,141 25
Total	330,219 17

Quarter ending June 30, 1883.

Sugar	$1,798,856 66
Old iron	172 80
Asphalt	11,276 25
Cocoa	66,674 45
Bitters	8,438 22
Hides	514 36
Empty beer kegs	111 75
Tonka beans	15,292 06
Cocoanuts	3,422 36
Old canvas	20 77
Bird-skins	61 54
Plants	26 50
Orchids	7 50
Books	47 50
Total	1,904,922 95

JOHN TOWLER,
Consul.

TURK'S ISLAND AND AGENCIES.

(Agencies: Cockburn Harbor and Salt Cay.)

TURK'S ISLAND.

Quarter ending March 31, 1883.

Guano, 443 tons	$4,433 50
Salt, 66,142 bushels	4,390 74
Sponge	645 61
Total	9,469 85

Quarter ending June 30, 1883.

Salt in bulk, 80,253 bushels	$5,703 15
Sponge	406 71
Guano, 21,000 tons	21,007 00
Total	27,116 86

N. K. SAWYER,
Consul.

COCKBURN HARBOR AGENCY.

Quarter ending March 31, 1883.

Salt, 80,776 bushels	$5,038 61

Quarter ending June 30, 1883.

Salt, 103,841 bushels	$6,769 16

J. W. TATEM,
Consular Agent.

SALT CAY AGENCY.

Quarter ending March 31, 1883.

Salt in bulk, 56,247 bushels	$3,595 24

Quarter ending June 30, 1883.

Salt in bulk, 87,160 bushels	$6,130 95

ALEXIS W. HARRIOTT,
Consular Agent.

FRENCH WEST INDIES.

GUADELOUPE, MARTINIQUE, AND ST. BARTHOLOMEW.

GUADELOUPE.

Quarter ending March 31, 1883.

Articles.	Hogsheads.	Barrels.	Bags.	Kilograms.	Value.
Muscovado sugar	2,482	251	....	1,552,664	$122,808 67
Usine sugar	197	121	883	242,378	17,887 29
Concrete sugar	50	....	....	42,139	2,605 11
Total sugars	2,729	372	883	1,837,181	143,301 07

Cacao, 15 barrels, 1,021 kilograms	$211 97
Copper (old), 1 package, 59 kilograms	9 50
Coffee, 5 kegs, 266 kilograms	96 92
Lead (old), 1 package, 32 kilograms	5 00
Lime-juice, 3 casks, 135 gallons	139 66
Yellow metal (old), 1 package, 247 kilograms	40 00
Zinc (old), 5 packages, 740 kilograms	15 34
Grand total	143,819 46

Quarter ending June 30, 1883.

	Hogsheads.	Barrels.	Bags.	Kilograms.	Value.
Muscovado sugar	8,055	745	....	5,136,552	$438,700 86
Usine sugar	1,935	855	9,673	2,411,056	222,332 17
Concrete sugar	346	....	....	287,034	23,451 61
Total sugars	10,336	1,600	9,673	7,834,642	684,484 64

CHARLES BARTLETT,
Consul.

MARTINIQUE AND AGENCY.

(Agency: Fort de France.)

MARTINIQUE.

Quarter ending March 31, 1883.

Sugar	$280,392
Old sails from vessels	100
Rum	55
Total	280,547

Quarter ending June 30, 1883.

Brown sugar	$724,061
Tamarinds in sirup	753
Total	724,815

W. H. GARFIELD,
Consul.

ST. BARTHOLOMEW.

(No returns.)

DANISH WEST INDIES.

ST. THOMAS AND AGENCIES.

(Agencies: Fredericksted and Santa Cruz.)

ST. THOMAS.

Quarter ending March 31, 1883.

Old metal	$413
Goat-skins	94
Bitters	242
Total	751

Quarter ending June 30, 1883.

Bay-rum	$5,030
St. Croix rum	6,132
Old metal	466
Total	11,629

V. V. SMITH,
Consul.

DUTCH WEST INDIES.

CURAÇAO AND AGENCY.

(Agency: Bonaire.)

CURAÇAO.

Quarter ending March 31, 1883.

Hides, skins, wool, &c	$89,206
Dyewoods	3,442
Coffee	8,724
Salt	1,750
Guano	8,800
Miscellaneous	17,332
	129,255
Charges	2,107
Total	131,362

Quarter ending June 30, 1883.

Hides, skins, and wool, &c	$119,769 98
Dyewoods, &c	20,511 69
Coffee	18,528 10
Salt	840 00
Miscellaneous	2,698 39
	162,348 16
Charges	1,810 81
Total	164,158 97

ALMONT BARNES,
Consul.

BONAIRE AGENCY.

Quarter ending June 30, 1883.

Salt, 10,600 barrels	$3,188 48

Quarter ending March 31, 1883.

Salt	$3,461 20

L. C. BOYÉ,
Consular Agent.

SPANISH WEST INDIES.

CUBA.

BARACOA.

Quarter ending March 31, 1883.

Fruit	$121,525 39

Quarter ending June 30, 1883.

Fruit	$388,959 41
Tobacco	279 50
Total	389,238 91

DATUS E. COON,
Commercial Agent.

CARDENAS.

Quarter ending March 31, 1883.

30 413 hogsheads sugar; 500 bags sugar; 27,216 hogsheads molasses; 2,894 tierces molasses; 130 tierces honey; 108 hogsheads asphaltum; 83 pipes asphaltum	$2,747,325 17

Quarter ending June 30 1883.

53,129 hogsheads sugar; 375 hogsheads melado; 36,904 hogsheads molasses; 3,955 tierces molasses; 265 tierces honey; 116,000 cigars; 31,321 cigars, 206,852 kilograms; 4 logs cedar	$3,966,221 30

JOSEPH A. NUNEZ,
Consul.

CIENFUEGOS AND AGENCIES.

(Agencies: Trinidad de Cuba and Zaza.)

CIENFUEGOS.

Quarter ending March 31, 1883.

Sugar	$1,548,340
Molasses	70,234
Miscellaneous	14,380
Total	1,632,955

Quarter ending June 30, 1883.

Sugar	$2,659,984
Molasses	132,357
Miscellaneous	35,092
Total	2,827,434

Quarter ending June 30, 1883.

Articles.	Cienfuegos,	Trinidad.	Zara.	Total.
Sugar	$2,659,984 10	$445,157 66	$58 822 60	$3,163,964
Molasses	182,357 99	49,134 44		181,492
Honey		4,344 40		4,344
Cedar and mahogany		1,784 21	10,400 00	12,184
Miscellaneous	85,092 09			35,092
	2,827,434 18	500,420 71	69,222 60	3,397,077

WM. P. PIERCE, *Consul.*

HAVANA AND AGENCIES.

(No returns.)

MATANZAS.

Quarter ending March 31, 1883.

Sugar, 40,067 hogsheads, 43 boxes	$2,936,365
Molasses, 20,068 hogsheads, 2,132 tierces	699,130
Tobacco, 105 bales	4,172
Mahogany, 224 pieces	1,235
Total	3,640,903

Quarter ending June 30, 1883.

50,146 hhds. and 382 bags sugar	$3,611,937
26,745 hhds. and 2,768 tcs. molasses	884,[illegible]90
356 tons guano	5,596
132 pcs. mahogany	450
60 bales tobacco	3,251
Total	4,506,225

UNITED STATES CONSULATE,
Matanzas, June 30, 1883.

DAVID VICKERS,
United States Consul

SAGUA LA GRANDE.

Quarter ending March 31, 1883.

Sugar, 19,136 hogsheads, 95 tierces, 200 bags	$1,350,373 02
Molasses, 2,586 hogsheads, 258 tierces	109,153 53
Melada, 190 hogsheads, 20 tierces	13,384 83
Total	1,472,911 38

Quarter ending June 30, 1883.

Sugar, 38,248 hogsheads, 188 tierces, 3,713 bags, 100 boxes, 1 barrel	$2,785,957 59
Molasses, 8,011 hogsheads, 802 tierces	325,649 39
Melada, 513 hogsheads, 60 tierces	36,018 88
Honey, 23 tierces	1,202 40
Total	3,148,828 26

CLARENCE C. FORD,
Commercial Agent.

SAN JUAN DE LOS REMEDIOS.

Quarter ending March, 1883.

10,214 hogsheads sugar	$764,643 83
522 hogsheads molasses, 48 tierces	19,671 60
70 bales tobacco	2,305 00
Total	786,620 43

W. H. POLLEYS,
Commercial Agent.

SANTIAGO DE CUBA AND AGENCIES.

(Agencies: Guantanamo, Manzanillo, and Santa Cruz.)

SANTIAGO DE CUBA.

Quarter ending March 31, 1883.

990 hogsheads, 698 bags sugar	$75,347 76
1,652 bags, containing 220,700 cocoa-nuts	3,621 69
420 logs, mahogany, cedar, and guayacan	16,051 52
66 empty casks	....
85 tierces precipitated copper	3,772 76
48 bags bones; 1 box with $500	....
1 parcel with $100	....
25 casks, 3 barrels honey	937 03
3 cases mineral samples	5 17
25 bales tobacco	833 68
Total	100,569 61

Quarter ending June 30, 1883.

7,234 hogsheads, 2,759 bags sugar	$593,469 47
1,838 bags, containing 182,300 cocoa-nuts	2,854 98
22 logs, mahogany, 720 lignum-vitæ	1,647 67
16,000 pineapples	823 70
1 box mineral, 3 boxes brandy	16 90
3,000 cigars	100 13
Total	598,912 85

JOHN C. LANDREAU,
Consul.

TRINIDAD DE CUBA.

Quarter ending March 31, 1883.

11,180 hogsheads, 323 tierces, 260 bags muscovado sugar	$110,890
405 hogsheads, 48 tierces muscovado molasses	15,589
88 logs wood	8,376
7 barrels coffee	281
140 tierces, 31 barrels honey	8,218
Total	343,356

Quarter ending June 30, 1883.

5,699 hogsheads, 587 tierces, 240 bags sugar	$445,157
1,418 hogsheads, 177 tierces molasses	49,134
76 tierces honey	4,344
140 pieces cedar wood	1,784
Total	500,420

JOSÉ PALAN,
Consular Agent.

PORTO RICO.

MAYAGUEZ.

Quarter ending March 31, 1883.

Sugar	$162,038
Coffee	159,395
Molasses	111,555
Oranges	14,809
Crude mineralized phosphate	3,149
Cocoa-nuts	2,717
Hides	911
Wooden boxes	204
Pineapples	148
Honey	22
Total	454,952

Quarter ending June 30, 1883.

Sugar	$270,668
Molasses	145,117
Coffee	25,371
Oranges	965
Cocoa-nuts	2,625
Pineapples	4,307
Phosphates	919
Hides	1,367
Achiote	602
Ginger	93
Tamarinds	44
Old yellow metal	61
Honey	32
Estropayos	47
Total	$452,223

GORHAM E. HUBBARD,
Commercial Agent.

PONCE.

Quarter ending March 31, 1883.

Sugar	$62,316
Molasses	355,034
Coffee	113,758
Rum	1,234
Fruit	1,005
Annotto	184
Total	533,554

Quarter ending June 30, 1883.

Molasses	$322,589 55
Coffee, in transit	113,242 10
Sugar	77,994 49
Cotton	3,133 35
Annotto	96 50
Types	30 50
Total	$517,086 49

E. E. WHITE,
Commercial Agent.

SAN JUAN AND AGENCIES.

(Agencies: Aguadilla, Arecibo, Guayama, Naguabo, and Viequez.)

SAN JUAN.

Quarter ending March 31, 1883.

Sugar, 1,011 hogsheads	$63,476 10
Molasses, 265 puncheons	9,229 66
Sugar, 300 bags	3,418 65
Bay-water, 6 casks	562 90
Total	76,697,22

EDW. CONROY,
Consul.

Quarter ending June 30, 1883.

Sugar, 4,645 hogsheads	$336,260 63
Molasses, 1,359 casks	43,727 88
Sugar, 2,332 bags	26,863 86
Bay-rum, 44 casks	3,880 24
Sundries	422 00
Total	411,154 61

ANDRÉS CROSAS,
Vice-Consul.

AGUADILLA AGENCY.

Quarter ending March 31, 1883.

Coffee	$79,782 00
Sugar	158,930 00
Molasses and sundries	2,350 00
Total	241 062 00

Quarter ending June 30, 1883.

Sugar	$156,345 00
Molasses	5,400 00
Coffee (bound for Europe)	23,255 00
Annotto	55 00
Total	185,025 00

AUG. GANSLANDT,
Consular Agent.

ARECIBO AGENCY.

Quarter ending March 31, 1883.

Sugars	$49,915 19
Molasses	1,181 57
Coffee	37,223 70
Satin-wood	874 83
Total	89,195 29

FERN'DO FERNANDEZ.

Quarter ending June 30, 1883.

Sugar	$279,534 [illegible]
Molasses	12,653 [illegible]
Coffee	48,658 [illegible]
Hides	600 [illegible]
Satin-wood	923 [illegible]
Total	342,371 73

EDWARDO J. FERNANDEZ,
Consul.

GUAYAMA AGENCY.

Quarter ending March 31, 1883.

Molasses	$104,269 [illegible]
Sugar	18,677 [illegible]
Bay-water	4,262 65
Specie	5,699 [illegible]
One marble bust	102 [illegible]
Total	133,011 73

J. C. McCORMICK,
Consular Agent.

NAGUABO, HUMACAO, AND FAJARDO.

Quarter ending March 31, 1883.

Sugar and molasses	$236,563 [illegible]

Quarter ending June 30, 1833.

Sugar and molasses	$619,046 [illegible]

W. HADDOCK,
Consular Agent.

VIEQUEZ.

Quarter ending June 30, 1883.

Sugar and molasses	$42,463 [illegible]

J. CREBON LANGFORD,
Consular Agent.

HAYTI.

CAPE HAYTIEN AND AGENCIES.

(Agencies: Gonaives and Port de Paix.)

CAPE HAYTIEN,

Quarter ending March 31, 1883.

Cocoa	$36 [illegible]
Coffee	260 [illegible]
Hides	3,199 65
Horns	10 [illegible]
Honey	1,434 [illegible]
Logwood	100,225 [illegible]
Peppers	196 [illegible]
Tortoise-shell	236 [illegible]
Goat-skins	2,249 [illegible]
Total	107,819 75

Quarter ending June 30, 1883.

Cocoa	$1,405 67
Coffee	57,687 76
Beeswax	24 15
Hides	3,660 25
Honey	2,266 16
Old metal	16 63
Logwood	31,006 84
Peppers	168 68
Goat-skins	1,869 05
Total	98,105 19

STANISLAS GOUTIER,
Consul.

GONAIVES AGENCY.

Quarter ending March 31, 1883.

Logwood, 4,269,600 pounds	$30,783 60
Coffee, 16,710 pounds	1,272 29
Hides, 30 pieces	54 00
Goat-skins, 487 pieces	158 85
Total	32,268 74

Quarter ending June 30, 1883.

Logwood, 3,588,050 pounds	$33,575 23
Coffee, 531,877 pounds	60,981 44
Coffee in the hull, 437 pounds	44 09
Cotton, 15 bales	655 00
Hides and goat-skins	1,225 37
Mahogany	41 06
Total	96,522 19

JOHN D. METZGER,
Consular Agent.

PORT DE PAIX AGENCY.

Quarter ending March 31, 1883.

Logwood	$71,705 80

Quarter ending June 30, 1883.

Coffee	$7,650 00
Honey	26 50
Logwood	57,898 20
Total	65,574 70

AUG. SCHUMACHER,
Acting Consular Agent.

PORT AU PRINCE.

Quarter ending March 31, 1883.

Goat-skins, 125 bales, 28,632½ pounds	$10,666 20
Logwood, 2,410,000 pounds	20,282 50
Sugar, 442½ packages, 203,740 pounds	12,489 37
Hides, 2,969 hides, 37,554 pounds	5,089 86
Honey, 654 barrels, 20,873 gallons	10,360 59
Gum guiac, 89 boxes, 7,127 pounds	1,313 78
Orange peel, 1,249 bags, 68,934 pounds	2,129 09
Bees-wax, 25½ packages, 4,286 pounds	1,174 29
Cocoa, 373 bags, 40,516 pounds	3,746 03
Coffee, 2,488 bags, 328,530 pounds	29,620 70
Lignum-vitæ, 27 boxes, 3,700 pounds	706 90

Molasses, 30 barrels, 9,000 pounds	$487 96
Manila hemp, 5 bales, 784 pounds	57 52
Dried ginger, 2½ barrels, 195 pounds	22 52
Old copper, 1,199 pounds	117 45
Ox shoes, 1 barrel, 1 hogshead, 459 pounds	14 11
Peanuts, 2 barrels, 159 pounds	8 62
Horns, 1 barrel, 1 hogshead, 402 pounds	12 06
Total	98,299 96

Quarter ending June 30, 1883.

Logwood	$16,063 94
Coffee, 2,544 bags, 342,985 pounds	33,886 27
Honey, 178 barrels, 5,916 gallons	2,753 96
Hides, 1,131 bales, 12,721 pounds	1,721 53
Orange peel, 49 bags, 2,378 pounds	117 37
Sugar, 198 barrels, 113,749 pounds	5,364 25
Sisal hemp, 1 bale, 488 pounds	3 71
Oxtail, 1 bale, 208 pounds	3 35
Goat-skins, 127 bales, 6,306 pounds	3,606 35
Gum guiac, 35 boxes, 8,132 pounds	1,775 17
Bees-wax, 7 boxes, 1,188 pounds	300 04
Ginger, 2 boxes, 8 pounds	25 22
Molasses, 44 barrels, 1,382 gallons	1,128 63
Cocoa, 415 bags, 22,292 pounds	2,495 31
Fustic, 7,350 tons	1,136 21
Old copper, 2½ barrels, 500 pounds	18 00
Total	70,401 21

JOHN MERCER LANGSTON,
Consul-General.

SAN DOMINGO.

PUERTO PLATA.

Quarter ending March 31, 1883.

Molasses, 35,900 gallons	$8,975 00
Fustic, 8 tons	160 00
Honey, 1,608 gallons	837 59
Hides, 2,326	5,644 68
Goat-skins, 3,582	1,432 80
Sugar, 6,333 pounds	284 99
Total	17,335 19

Quarter ending June 30, 1883.

Sugar	$10,979 05
Molasses	1,890 00
Honey	388 60
Hides	7,462 40
Goat-skins	866 40
Tobacco	517 45
Divi divi	832 52
Mahogany	4,098 01
Old metal	168 52
Total	27,202 96

THOS. SIMPSON,
Consul.

SAMANA.

Quarter ending March 31, 1883.

Cocoa-nuts	$48 00
Do	37 92
Do	234 00
Sugar and molasses	4,500 00
Cocoa-nuts	240 00
Do	118 00
Total	5,177 92

Quarter ending June 30, 1883.

Cocoa-nuts	$70	00
Sugar and molasses	3,262	00
Cocoa-nuts	170	16
Books and clothing	2	50
Plantain flour	12	50
Cocoa-nuts	102	50
Sugar	4,708	17
Fruit and cocoa-nuts	384	25
Specimens of birds and insects	52	50
Cocoanuts-	128	60
Gun, and attachments	2	50
Coffee	37	92
Cocoa-nuts	203	50
Sugar and molasses	3,364	00
Sugar and copper	1,318	75
Total	13,819	85

LELAND C. BACON,
Consul.

SAN DOMINGO AND AGENCIES.

(Agencies: Azua and Macoris.)

SAN DOMINGO.

Quarter ending March 31, 1883.

Sugar, 4,639,894 pounds	$202,567	11
Molasses, 44,490 gallons	6,828	00
Honey, 30,720 gallons	10,683	63
Lignum-vitæ, 250.745 tons	5,654	82
Mora, 10.115 tons	141	61
Bera, 4.300 tons	51	60
Hides, 1,297 pounds	220	49
Lignum-vitæ	133	20
Miscellaneous, lot of rope and scales	380	00
Charges	18,365	31
Total	245,025	77

Quarter ending June 30, 1883.

Sugar, 8,199,909 pounds	$357,654	32
Molasses, 55,220 gallons	9,787	97
Lignum-vitæ, 938.545 tons	6,587	55
Honey, 23,865 gallons	9,304	90
Mahogany, 4,762 feet	197	33
Mora, 13 tons	156	00
Lignum-vitæ gum, 350 pounds	70	00
Logwood, 125 tons	1,572	00
Fustic, 15 tons	180	00
Charges	32,637	27½
Total	418,147	34½

H. C. C. ASTWOOD,
Consul.

MACORIS AGENCY.

Quarter ending March 31, 1883.

Fifty (50) hogsheads sugar, 86,441 pounds	$4,138	75

Quarter ending June 30, 1883.

Sugar and molasses	$43,252	73
Sugar	10,554	85
Sugar and molasses	11,863	96
Sugar and molasses	38,744	87
Honey	461	25
Sugar and molasses	5,230	88
Total	110,198	54

JAMES W. MELLOR,
Consular Agent.

AZUA AGENCY.

Quarter ending March 31, 1883.

6,018 packages sugar, weighing 1,019,354 pounds	$39,876 32
112 ox hides, weighing 2,698 pounds	345 30
2,732 sticks lignum-vitæ, 177½ tons	3,993 75
Mahogany	160 00
73 barrels molasses, costing 2,550 gallons	1,370 00
39 boxes gum guaiac, 2,859 pounds	593 96
Total	46,339 33

Quarter ending June 30, 1883.

7,690 packages of sugar, weighing 1,028,413 pounds	$33,795 92
32 barrels honey, measuring 1,160 gallons	610 30
223 tons lignum-vitæ	4,312 99
Total	39,719 71

H. CHANDRUC,
Consular Agent.

EXPORTS DECLARED IN ASIA.

ASIATIC TURKEY.

ASIA MINOR, SYRIA, AND PALESTINE.

SMYRNA AND AGENCY.

(Agency: Mytelene.)

SMYRNA.

Quarter ending March 31, 1883.

Almonds	$165	40
Carpets and rugs	16,387	03
Emery stone	36,352	28
Goat-skins	657	42
Gum mastic	829	08
Gum tragacanth	7,734	08
Licorice root	238,464	93
Nut-galls	688	12
Opium	94,145	85
Pine-nuts	329	34
Rags	15,147	67
Raisins	5,261	26
Sponges	580	21
Sundries	78	57
Wool	57,950	83
Total	474,772	07

Quarter ending June 30, 1883.

Carpets and rugs	$64,798	91
Emery stone	17,408	64
Figs	3	80
Gum mastic	308	30
Gum tragacanth	1,137	16
Licorice root	113,390	30
Opium	27,632	14
Rags	7,456	06
Raisins	10	60
Sundries	55	35
Wool	46,393	61
Total	278,594	87

W. E. STEVENS,
Consul.

75

SYRIA.

BEIRUT AND AGENCIES.

(Agencies: Aintab, Aleppo, Alexandretta, Damascus, Haifa, Latakia, Marash, Sid
Tarsus, and Tripoli.)

BEIRUT.

Quarter ending March 31, 1883.

Unwashed wool	$30,034
Bitumen	7,621
Total	37,655

Quarter ending June 30, 1883.

Nil.

JOHN T. ROBESON,
Consul.

PALESTINE.

JERUSALEM AND AGENCY.

(Agency: Jaffa.)

(No returns.)

ADEN.

Quarter ending March 31, 1883.

Coffee	$93,443
Skins	141,394
Hides	21,908
Feathers	3,652
Shawls	296
Rugs	100
Gum	5
Total	260,800

Quarter ending June 30, 1883.

Coffee	$158,203
Skins	115,499
Feathers	7,981
Gum	197
Total	281,881

JAMES S. WILLIAMS,
Consul.

MUSCAT.

(No returns.)

PERSIA.

(No returns.)

BRITISH INDIA.

BOMBAY.

(No returns.)

CALCUTTA AND AGENCIES.

(Agencies: Akyab, Bassein, Chittagong, Madras, Moulmein, and Rangoon.)

CALCUTTA.

Quarter ending March 31, 1883.

Drugs	$1,971,010	40
Fishing rods	404	80
Gunny-bags	464,012	00
Gunny-cloth	44,530	80
Hides	325,068	40
Jute	124,575	20
Jute butts and rejections	1,052,446	80
Linseed	256,658	40
Oil	4,538	80
Rags	22,221	60
Rubber	20,298	40
Saltpeter	152,038	80
Silk and seersucker piece goods	9,059	60
Skins	351,434	80
Seeds (other than linseed)	85	60
Tea	36,472	40
Miscellaneous	10,880	00
Total	4,845,736	80

H. MATTSON,
Consul-General.

Quarter ending June 30, 1883.

Drugs	$340,644	00
Fishing rods	594	00
Gunny-bags	411,624	00
Gunny-cloth	21,107	20
Hides	270,364	80
Jute	97,570	40
Jute butts and rejections	351,313	20
Linseed	177,354	00
Oil	8,233	20
Rags and paper stock	36,957	60
Rubber	47,182	40
Saltpeter	113,352	00
Silk and seersucker piece goods	474	40
Skins	157,839	20
Tea	12,660	40
Woolen goods	481	20
Miscellaneous	7,560	00
Total	2,055,313	60

C. C. BANCROFT,
Vice Consul-General.

CEYLON.

Quarter ending March 31, 1883.

Cinchona	$2,506	00
Cinnamon	2,424	00
Coffee	2,600	00
Coir yarn and fiber	13,815	00
Cocoanut oil	85,943	00
Citronella oil Essential oil	11,446	00
Plumbago	69,337	00
Total	188,071	00

Quarter ending June 30, 1883.

Cinchona	$787	00
Cinnamon	2,693	00
Cocoanut oil	50,542	00
Coir	10,945	00
Coffee	7,530	00
Ebony	247	00
Essential oil	12,252	00
Orchilla	421	00
Plumbago	72,749	00
Total	158,166	00

W. MOREY,
Consul.

STRAITS SETTLEMENTS.

SINGAPORE AND AGENCY.

(Agency: Penang.)

SINGAPORE.

Quarter ending March 31, 1883.

Tin	$463,496	64
Black pepper	206,112	54
White pepper	8,313	11
Gambier	149,292	12
Rattans	190,865	30
Tapioca (flake, pearl, and flour)	43,724	39
Sago (flour)	18,326	91
Sago (pearl)	1,804	94
Nutmegs	54,556	68
Cloves	4,929	36
Mace	1,253	97
Coffee	16,972	53
Gum copal	42,761	19
Gum damar	150	70
Borneo rubber	7,074	00
Essential oil (citronella and nutmegs)	3,112	99
Cutch	5,489	10
Dragon's blood	726	00
Tobacco	12,162	38
Buffalo hides	8,423	17
Putch leaves	1,147	90
Cubebs	11	47
Malacca and Pontianak canes	694	37
Keelah shells	45	64
Silk	42	03
Total	1,241,489	43

Quarter ending June 30, 1883.

Tin	$686,530	99
Black pepper	268,294	09
White pepper	17,153	17
Gambier	201,201	21
Cutch	495	84
Rattans	173,617	87
Tapioca (flake, pearl, and flour)	34,548	36
Sago (pearl)	392	50
Sago (flour)	28,876	84
Nutmegs	82,949	76
Cloves	10,786	16
Mace	5,481	99
Coffee	8,875	14
Gum copal	29,541	10
Gum damar	1,044	50
Gum benjamin	639	88
Borneo rubber	27,831	58
Essential oil (citronella)	5,088	87
Mother of pearl shells	5,168	27
Green snail shells	3,601	05
Buffalo hides	7,289	82
Malacca canes	1,774	76
Tobacco	515	22
Sticklac	283	55
Tutch leaves	646	31
Dragon's blood	122	00
Cocoa	96	03
Sandalwood	64	93
Total	1,602,911	74

A. G. STUDER,
Consul.

PENANG AGENCY.

Quarter ending March 31, 1883.

Tin	$334,977	72
Black pepper	25,256	65
Sugar	13,552	75
White pepper	8,857	29
Nutmegs	7,940	71
Rattans	5,724	33
India rubber	5,580	46
Hides (buffalo)	2,018	99
Tapioca	136	68
Nutmeg oil	84	00
Total	404,129	58

L. HÜTTENBACH,
Consular Agent.

Quarter ending June 30, 1883.

Tin	$238,238	55
Sugar	25,806	84
Black pepper	12,477	39
Nutmegs	6,508	33
Cloves	3,055	74
Mace	2,700	13
Rattans	1,781	50
Cinnamon	336	59
Total	290,905	07

JOS. HEIM,
In charge of the Consular Agency.

DUTCH INDIA.

BATAVIA AND AGENCY.

(Agency: Soerabaya.)

BATAVIA.*

Quarter ending March 31.

	Guilders.	
Coffee	1,343,124	64
Sugar	143,251	00
Rattans	7,391	88
Nutmegs	48,344	27
Mace	2,091	54
Cassia	91	76
India rubber	8,700	00
Sticks, etc	440	00
Gum damar	17,497	79
Gum copal	48,373	21
Gum benjamin	1,648	00
Gum Gielan	404	00
Bamboo hats	2,549	77
Falie agel	82	50
Hides	4,285	52
Total	1,628,275	88
At exchange, 40.2	$654,566	90

OSCAR HATFIELD,
Consul.

PADANG.

Quarter ending June 30, 1883.

Coffee	$984,928	00
Rattans	12,483	00
Cassia	13,979	00
Nutmegs	31,710	00
Mace	4,280	00
India rubber	4,603	00
Black pepper	1,140	00
Hides	560	00
Cloves	1,994	00
Total	1,055,677	00

L. M. BEELS,
Vice-Consul.

PHILIPPINE ISLANDS.

MANILA AND AGENCY.

(Agency: Cebu.)

MANILA.

Quarter ending March 21, 1883.

Hemp	$1,293,029	64
Sugar	768,894	39
Cigars	9,932	65
M. O. P. shells	4,111	74
Hide cuttings	3,967	80
Hats	1,848	92
Ylang Ylang oil	1,268	94
Sapan wood	1,337	88
Gum copal	1,101	85
Cordage	737	15
Total	2,086,230	96

---

* Including Macassar, Celebes.

Quarter ending June 30, 1883.

Sugar	$1,252,540 61
Hemp	584,243 61
Coffee	13,443 20
Hide cuttings	6,340 26
Cigars	5,970 35
Indigo	5,416 57
Gum copal	3,029 67
Sapan wood	1,819 32
Mother-of-pearl shells	900 37
Straw hats	818 94
Sundry	89 80
Total	1,874,662 70

R. D. TUCKER,
Acting Consul.

CEBU AGENCY.

Quarter ending March 31, 1883.

Sugar	$246,776 23

Quarter ending June 30, 1883.

Sugar	$213,681 74

C. R. BLAIR PICKFORD,
Consular Agent.

JAPAN.

KANAGAWA AND AGENCY.

(Agency: Hakodadi.)

KANAGAWA.

Quarter ending March 31, 1883.

Silk	$1,280,201 69
Tea	242,740 30
Curios	31,634 55
Fish-oil	6,790 64
Miscellaneous	2,353 43
Bamboo poles	1,919 75
Plants and trees	1,851 35
Paper	1,452 34
Rags	1,282 88
Ginger	1,162 09
Fans	819 41
Shell fish	181 66
Quicksilver flasks	140 02
Total	1,572,530 11

GEO. E. RICE,
Vice Consul-General.

Quarter ending June 30, 1883.

Tea	$2,287,509 72
Silk	791,795 82
Curios	75,150 18
Miscellaneous	4,576 25
Fish-oil	3,902 50
Paper	2,549 85
Mushrooms	894 64
Plants and trees	621 25
Fire-works	457 33
Lanterns	221 35
Bamboo	171 72
Total	3,167,850 61

THOS. B. VAN BUREN,
Consul-General.

NAGASAKI.

Quarter ending March 31, 1883.

Screens	$20 00
Tea	22,714 85
Total	22,734 85

Quarter ending June 30, 1883.

Tea	$9,704 66
Porcelain	205 21
Sundries	669 00
Total	10,578 87

ALEXANDER C. JONES,
Consul.

OSAKA AND HIOGO.

Quarter ending March 31, 1883.

Tea, 1,305,224 pounds	$259,012 61
Fans	6,931 19
Curios	10,763 25
Vegetable wax	567 56
Antimony	742 90
Camphor	75,624 53
Rags	3,966 87
Whanghee canes	2,306 46
Miscellaneous	9,839 37
Total	369,757 06

Quarter ending June 30, 1883.

Tea, 4,332,908 pounds	$1,108,309 31
Camphor	107,651 14
Rags	13,566 54
Curios	11,790 79
Bamboo	3,053 45
Wax	2,754 57
Soapstock	2,704 18
Shells	2,551 01
Fish-oil	2,293 96
Antimony	1,450 43
Miscellaneous	11,611 70
Total	1,267,736 29

J. STAHEL,
Consul.

SIAM.

BANGKOK.

Quarter ending June 30, 1883.

Personal effects and curios	$294 50

JOHN A. HALDERMAN,
Consul-General.

CHINA.

AMOY AND AGENCY.

(Agency: Tamsui and Keelung.)

AMOY.

Quarter ending March 31, 1883.

Formosa oolong tea	$200,727 08
Amoy oolong tea	121,864 43
Total	322,591 51

Quarter ending June 30, 1883.

Formosa oolong	$1,249,105	89
Amoy oolong	42,332	95
Ning Yong oolong	12,633	48
Formosa and Amoy oolong	42,622	86
Formosa oolong and Amoy congon	6,326	08
Personal effects	35	00
Total	1,353,056	26

W. ELWELL GOLDSBOROUGH,
Consul.

CANTON AND AGENCIES.

(Agencies: Hoikow, Kiungchow, Pakhoi, and Swatow.)

CANTON.

Quarter ending March 31, 1883.

Blackwood ware	$1,504	20
Bristles	1,954	33
Canes	1,224	42
Cassia	14,279	86
Chinaware	8,018	28
Fire-crackers	59,101	28
Ginger	2,739	58
Lacquered ware	1,287	54
Lanterns	86	24
Matting	77,239	34
Palmleaf fans	3,988	02
Paper	758	03
Preserves	2,890	81
Rattan ware	2,455	64
Raw silk	196,707	89
Rhubarb	191	67
Silk piece goods	18,746	28
Soy	1,706	22
Star aniseed	478	75
Straw goods	1,083	02
Sundries	231	68
Tea	627	46
Total	397,300	54

CHARLES SEYMOUR,
Consul.

CHIN-KIANG.

(No returns.)

FOO-CHOW.

Quarter ending March 31, 1883.

Tea, 50,636 pounds	*$8,071	22

Quarter ending June 30, 1883.

Tea, 327,654 pounds	*$82,784	85

J. C. A. WINGATE,
Consul.

HANKOW AND AGENCIES.

(Agencies: Ichang and Kiu-Kiang.)

HANKOW.

Quarter ending June 30, 1883.

Teas, 3,233.10 piculs, = 140,100 pounds	$124,108	80

ISAAC F. SHEPARD,
Consul.

---

* This value is in "American trade dollars" or "Mexicans." U. S. gold has no fixed value here.

NINGPO.

Quarter ending March 31, 1883.

Chinese embroideries	$88 66
Panama straw hats	158 15
Effects	32 55
Tea	56 00
Porcelain vases	50 50
Total	385 86

Quarter ending June 30, 1883.

Nil.

EDWIN STEVENS,
Consul.

SHANGHAI.

Quarter ending June 30, 1883.

Cowhides	$181, 543 64
Goat-skins	21, 052 73
Musk	36, 163 73
Rhubarb	12, 036 40
Silk	528, 537 06
Straw braid	99, 334 51
Sundries	14, 196 71
Tea	358, 774 77
Wool	42, 227 00
Total	1, 293, 866 57

O. N. DENNY,
Consul-General.

TIEN-TSIN AND AGENCY.

(Agency: Chefoo.)

TIEN-TSIN.

Quarter ending March 31, 1883.

Straw braid	$10, 974 60
Second-hand silk	1, 628 16
Various skins	1, 500 00
Feathers	970 36
Horse-hair and yak-tails	1, 056 12
Vases	306 43
Total	16, 435 67

Quarter ending June 30, 1883.

Straw braid	$44, 106 29
Camels' hair	5, 760 00
Sheep's wool	14, 687 10
Raw goat-skins	10, 839 26
Feathers	3, 227 02
Sleigh robes	2, 205 00
Hearth rugs	175 00
Carpet wool	863 25
Porcelain	104 56
Total	81, 967 50

JAS. C. ZUCK,
Consul.

CHEFOO AGENCY.

Quarter ending March 31, 1883.

820 bales of straw braid	$30,704 50

Quarter ending June 30, 1883.

Straw braid	$41,810 99
Pongees	232 53
Raw silk	1,125 75
Total	43,169 27

A. R. PLATT,
Consular Agent.

HONG-KONG.

First quarter, 1883.

Sundries	$58,475 00
Provisions	101,152 00
Rice	424,142 00
Tea	23,354 00
Clothing	21,132 00
Shoes	6,100 00
Oil	32,652 00
Silk	224,844 00
Silk goods	34,403 00
Fire-crackers	31,656 00
Tobacco	9,739 00
Matting	29,976 00
Medicine	8,319 00
Sugar	88,133 00
Prepared opium	564,082 00
Crude opium	5,126 00
Cassia	14,129 00
Chinaware	3,211 00
Pepper	6,756 00
Paper	4,645 00
Rattan	5,651 00
Coffee	265 00
Fish-net	1,148 00
Sago	835 00
Tapioca flour	7,561 00
Wine	3,785 00
Human hair	1,498 00
Rifles	4,334 00
Gin	157 00
	1,717,260 00

Second quarter, 1883.

Sundries	$82,599 00
Provisions	125,853 00
Rice	395,250 00
Tea	44,798 00
Clothing	42,839 00
Shoes	13,151 00
Oil	53,192 00
Silk	71,279 00
Silk goods	77,147 00
Fire-crackers	64,811 00
Tobacco	14,611 00
Matting	37,778 00
Medicine	17,472 00
Sugar	241,953 00
Prepared opium	1,361,382 00
Crude opium	10,489 00
Cassia	46,033 00
Chinaware	9,286 00
Pepper	18,541 00
Paper	12,135 00

Rattan	$10,30[illegible]	[illegible]
Fish-net	745	[illegible]
Fans	2,251	[illegible]
Quicksilver flasks	912	[illegible]
Nutmegs	494	[illegible]
Camphor-wood trunks	962	[illegible]
Sago	950	[illegible]
Tapioca flour	6,989	[illegible]
Wine	5,930	[illegible]
Personal effects	206	[illegible]
Curios	183	[illegible]
Human hair	5,685	[illegible]
Patna	1,000	[illegible]
Cigars	484	[illegible]
Rifles	4,334	[illegible]
	2,782,532	[illegible]

JNO. S. MOSBY,
Consul.

AUSTRALASIA.

(Comprising the colonies of Victoria, New South Wales, Queensland, South Australia, West Australia, Tasmania, and New Zealand.)

VICTORIA.

MELBOURNE.

Quarter ending March 31, 1883.

Eucalypti extract and seed	$76	[illegible]
Iron cylinders*	48	[illegible]
India rubber (sheet)*	33	[illegible]
Objects of natural history	401	[illegible]
Skins, kangaroo	234	44
Wool, greasy, 49 bales	3,638	[illegible]
Total	4,432	[illegible]

Quarter ending June 30, 1883.

Analine color	$57	[illegible]
Animals and birds	294	[illegible]
Fruit:*		
Apples	717	[illegible]
Peaches, dried	1,358	[illegible]
Wagon gear*	280	[illegible]
Wool, greasy	19,412	[illegible]
Oil stoves and heaters*	260	[illegible]
Total	22,380	[illegible]

O. M. SPENCER,
Consul-General.

NEW SOUTH WALES.

SYDNEY AND AGENCIES.

(Agencies: Newcastle and Brisbane.)

SYDNEY.

Quarter ending March 31, 1883.

Canned goods	$776	[illegible]
Coal	5,031	[illegible]
Drugs and medicines	425	[illegible]
Glue stock	255	[illegible]
Hides	22,22[illegible]	[illegible]

---

* Of American manufacture, re-exported.

Oil	1,125	20
Opium	162,859	12
Pelts	3,295	11
Shell	23,153	70
Soap stock	4,320	18
Tin	204,892	34
Wool	27,153	10
	455,513	30

Quarter ending June 30, 1883.

Acacia seed	$172	63
Apples (dried), American goods	2,714	76
Coal	63,756	09
Drugs	186	06
Glue stock	141	43
Hide	25,198	37
Household goods	510	32
Kerosene shale	1,119	37
Olive oil	1,707	24
Opium	153,634	42
Pearl shell	1,560	09
Peaches (dried), American goods	1,542	55
Salmon, American goods	3,498	03
Silver ore	546	64
Soap stock	23,940	80
Tin	272,082	77
Wool	4,008	75
Total	476,320	32

CHARLES KAHLO,
Consul.

NEWCASTLE AGENCY.

Quarter ending March 31, 1883.

2,394 tons of coal	$6,585	00
1,924 tons of coal	5,290	00
1,480 tons of coal	4,070	00
1,500 tons of coal	4,125	00
1,035 tons of coal	2,845	00
958 tons of coal	2,630	00
1,955 tons of coal	5,375	00
1,388 tons of coal	3,815	00
1,133 tons of coal	3,115	00
1,400 tons of coal	3,850	00
15,167 tons of coal	41,700	00

A. S. MOREY,
Acting Consular Agent.

QUEENSLAND.

(No returns.)

SOUTH AUSTRALIA.

ADELAIDE AGENCY.*

(No returns.)

WEST AUSTRALIA.

ALBANY AGENCY.*

(No returns.)

---

*Agencies under Melbourne.

TASMANIA.

HOBART.

Quarter ending March 31, 1883.

Ingots of tin	$4,844

A. G. WEBSTER,
Consul

NEW ZEALAND.

AUCKLAND AND AGENCIES.

(Agencies: Christ Church; Dunedin; Monganui; Russell; Wellington.)

CHRIST CHURCH AGENCY.

Quarter ending June 30, 1883.

Forty-one casks salted sheepskins	$3,601

C. B. TAYLOR,
Consular Agent.

DUNEDIN AGENCY.

Quarter ending March 31.

Wool	$39,731

H. DRIVER,
Consular Agent.

EXPORTS DECLARED IN EUROPE.

RUSSIA.

HELSINGFORS AND AGENCY.

(Agency: Wyborg.)

(No returns.)

MOSCOW.

Quarter ending March 31, 1883.

Camel-hair	$54,355 87
Wools	23,670 66
Paper cigarettes	94 92
Total	78,121 45

AUGUST WEBER,
Vice and Acting Consul.

ODESSA.

Quarter ending March 31, 1883.

Wool	$18,759 29

Quarter ending June 30, 1883.

55 bales wool	$3,108 96
Personal effects	3,002 50
Total	6,111 46

FULTON PAUL,
Consul.

ST. PETERSBURG AND AGENCIES.

(Agencies: Cronstadt, Revel, and Riga.)

ST. PETERSBURG.

Quarter ending March 31, 1883.

Bristles	42,515 08
Isinglass	5,510 10
Platina	12,226 93
Seeds, druggists', &c	1,100 90
Vestments for church use	1,171 65
Various	69 64
Total	62,594 30
Total in same quarter in 1882	67,963 68
Decrease	5,369 38

Quarter ending June 30, 1883.

Bristles	$61,917
Bronzes	731
Church ornaments and vestments	1,605
Crash, duck, canvas, &c	12,931
Isinglass	1,203
Platina	4,197
Rope and cordage	26,656
Seeds	614
Soap	215
Various	62
Total	110,171
Total in same quarter in 1882	154,559
Decrease	44,387

EDGAR STANTON,
Consul-General.

RIGA AGENCY.

Quarter ending June 30, 1883.

Hemp	$9,100
Liqueurs	261
Horse-manes	2,117
Total	11,479

Quarter ending March 31, 1883.

1,800 bottles of liquor	$761
477 bales of hemp	15,318
28 bales of horse-manes	806
Total	16,885

N. P. A. BOMHOLDT,
Consular Agent.

WARSAW.

Quarter ending March 31, 1883.

Flax textures	$681
One-wheeled carriage	37
Flax textiles	285
Total	1,003

JOSEPH RAWICZ,
Consul.

SWEDEN AND NORWAY.

SWEDEN.

GOTTENBURG AND AGENCY.

(Agency: Malmo.)

GOTTENBURG.

Quarter ending June 30, 1883.

Swedish iron	$345,459
Swedish calf-skins	16,272
Swedish matches	7,438
Swedish punch	753
Swedish whisky	61
Swedish printed books	481
Swedish skin jackets	307
Total	370,673
Same quarter 1882	526,806
Decrease	156,132

SIDNEY W. COOPER,
Consul.

STOCKHOLM AND AGENCIES.

(Agencies: Christiansted, Gefle, Norrköping, Söderhamn, and Sundsvale.)

STOCKHOLM.

Quarter ending March 31, 1883.

Arrac punch	$48 76
Calf-skins	5,075 85
Filtering paper	206 36
Iron:	
Bars and bundles	112,728 35
Barends	322 83
Coils	88,877 59
Coils of iron wire	5,308 55
Coils of steel rods	5,234 85
Pig	12,901 34
Rough bars	275 91
Razors	571 73
Total	231,552 12
From the consular agency of Gefle:	
Iron: Wire rods	8,576 24

Quarter ending June 30, 1883.

Arrac punch	$141 50
Books	2,989 92
Dynamite presses	217 32
Iron:	
Bars and bundles	247,047 64
Barends	659 76
Coils	27,877 56
Coils of iron wire	1,444 73
Nail rods	44,325 03
Rivet rods	45,151 13
Screw rods	4,530 79
Wire rods	6,259 83
Pig	18,439 66
Razors and knives	2,434 88
Separators	593 74
Total	402,113 49
From Gefle:	
Wire rods	7,742 76

NERE A. ELFWING,
Consul.

NORWAY.

BERGEN AND AGENCIES.

(Agencies: Drontheim and Stavanger.)

BERGEN.

Quarter ending June 30, 1883.

Cod-liver oil	$1,539 90
Skins	854 35
Books	676 90
Herrings, cured	443 75
Codfish, dried	291 40
Iron ore	355 25
Cheese	188 75
Anchovies	35 75
Sundries	21 00
Total	4,407 05

F. G. GADE,
Consul.

CHRISTIANIA.

Quarter ending June 30, 1882.

Empty petroleum barrels	$2,556
Books	2,760
Wood pulp	1,686
Cod-liver oil	1,521
Sundries	1,075
Total	9,853

GERH. GADE,
Consul.

GERMANY.

CONSULATE-GENERAL OF FRANKFORT-ON-THE-MAIN.

(The district of the consulate-general of Frankfort-on-the-Main embraces the fo- lowing consular districts and agencies: Aix-la-Chapelle and agency at Burtsch- Barmen, Cologne, Crefeld, Dusseldorf, Elberfeld, Frankfort, Kehl, Mannheim, Ma- ence, Munich and agency at Augsburg, Nuremberg and agency at Fürth, Sonneber- and Stuttgart. Following the statements in detail for the several consulates an- agencies, a consolidated statement of the whole, prepared by the consul-general a- Frankfort, is given.)

AIX-LA-CHAPELLE AND AGENCY.

(Agency: Bursheid.)

AIX-LA-CHAPELLE.

Quarter ending March 31, 1883.

Chemicals	$209
Glassware	34,004
Gloves	38,324
Fancy goods	13,549
Lead	3,606
Needles and pins	8,834
Paper	4,039
Wire	7,419
Woolen cloth	188,861
Zinc	1,935
Total	300,827

The decrease, $139,863.34, is owing to the tariff discussion.

Quarter ending June 30, 1883.

Fancy goods	$11,315
Furniture (old)	102
Glassware	30,449
Gloves	4,732
Machinery	475
Paper	8,682
Pins and needles	10,000
Steel rods	5,145
Wire	26,955
Woolen cloth	313,686
Zinc	52,675
Total	464,20

JAMES T. DU BOIS,
Consul.

BARMEN.

Six months ending June 30, 1883.

Articles.	Quarter ending March 31, 1883.	Same period in preceding year.	Quarter ending June 30, 1883.	Same period in preceding year.
Braids, bindings, and trimmings	$187,124 18	$147,340 78	$166,341 02	$185,379 44
Buttons and button stuffs	112,318 45	39,517 69	117,656 84	51,048 40
Dress and piece goods:				
Cotton		1,250 40		
Silk and silk mixed	83,684 53	95,201 79	58,358 43	130,491 40
Woolen and woolen mixed	206,535 32	225,258 75	240,703 58	341,102 74
Dyes and chemicals: Aniline, alizarine, &c	60,145 39	34,223 58	49,679 22	25,553 28
Hatbands and ribbons	200,990 31	253,151 24	148,189 89	221,270 81
Metal goods:				
Brass, bronze, and fancy	8,034 37	22,006 41	24,095 65	24,934 10
Hardware and cutlery	186,902 43	191,362 56	133,259 35	154,898 65
Iron and steel	67,444 51	162,102 40	195,391 45	162,091 19
Provisions: Hams, sausages, &c	4,135 65	3,264 44	2,567 46	8,005 06
Various	13,165 07	4,978 78	10,365 15	4,047 19
Total	1,130,480 21	1,179 658 91	1,146,608 04	1,308,822 28
Total in preceding year	1,179,658 91		1,308,822 28	
Decrease	49,178 70		162,214 24	

WOLFGANG SCHOENLE,
Consul.

COLOGNE.

Quarter ending March 31, 1883

Books and stationery	$1,351 43
Chemicals	19,2 64
Chemical apparatus	631 82
Cologne water	3,441 62
Dyes and colors	1,000 33
Iron	6,092 80
Leather	41,551 90
Mineral water	63,346 32
Porcelain and earthen ware	9,697 58
Red lead	57,202 06
Silks, ribbons, and velvet	28,685 27
Silk hair-nets	7,989 45
Soap	9,968 70
Steel	57,087 79
Sundries	5,494 31
Trimmings	11,800 32
Wine	13,638 84
Total	331,278 18

Quarter ending June 30, 1883.

Books and stationery	$340 34
Chemicals	1,723 26
Chemical apparatus	231 42
Cologne water	2,447 95
Dyes and colors	695 31
Leather	36,829 61
Machinery	3,716 54
Mineral water	111,342 14
Porcelain and earthen ware	18,837 11
Red lead	87,443 79
Silks, ribbons, and velvet	113,513 79
Silk hair-nets	5,590 36
Soap	1,667 31
Steel	129,197 32
Sundries	11,966 96
Trimmings	2,944 87
Wine, liquors, beer	30,806 02
Total	559,294 10

SAMUEL SPACKMAN,
Consul.

CREFELD.

(See page 109.)

DUSSELDORF.

Quarter ending June 30, 1883.

Articles.	Quarter ending June 30, 1883.	Same period in preceding year.
Ammunition: Caps and cartridges	$4,117 22	$10,090 [illegible]
Articles of art: Oil paintings, chromos, &c	4,462 13	1,567 47
Books	392 28	....
Braids, bindings, and trimmings	2,826 56	8,971 45
Buttons and button stuffs	3,363 55	3,550 [illegible]
Dextrine and starch	7,606 46	....
Dress and piece goods:		
Italian cloths	13,877 65	....
Woolen and woolen mixed	53,423 37	153,635 67
Liquors: Wines, spirits, beer, &c	791 65	66 25
Metal goods:		
Hardware and cutlery	70,661 27	52,763 [illegible]
Iron and steel	227,231 16	120,632 35
Machinery	875 46	982 [illegible]
Mineral water (natural)	2,302 88	6,566 71
Miscellaneous	3,765 44	24,458 73
Porcelain	815 71	....
Ultramarine blue and colors	13,682 54	4,824 20
Total	410,195 33	388,148 02
Total for same quarter in preceding year	388,148 02	....
Increase	22,047 31	....

WM. D. WAMER,
Commercial Agent.

ELBERFELD.

Articles.	Quarter ending March 31, 1883.	Same period in preceding year.	Fraction of quarter ending May 10, 1883.
Braids, bindings, and trimmings	$5,602 78	$16,577 97	$1,297 54
Buttons and button stuffs	5,135 09	324 10	223 90
Dress and piece goods:			
Cotton	....	1,250 40	....
Silk and silk mixed	64,876 40	90,180 64	33,069 06
Woolen and woolen mixed	44,352 48	60,253 18	20,947 14
Dyes and chemicals: Aniline, alizarine, &c	23,647 58	15,939 32	14,557 61
Hatbands and ribbons	57,181 41	69,529 84	14,290 72
Metal goods: Hardware and cutlery	7,765 90	14,403 56	1,272 14
Various	873 55	233 59	396 09
Total	209,435 19	268,692 60	86,054 07
Total in preceding year	268,692 60	....	....
Decrease	59,257 41	....	....

EMILE HEYER,
Consular Agent.

FRANKFORT-ON-THE-MAIN.

Quarter ending March 31, 1883.

Albums, books, and stationery	**$8,637 [illegible]**
Agate ware	**3,625 [illegible]**
Copper and brass	**2,156 [illegible]**
Clay (for pipes)	**9,213 [illegible]**
China, glass, porcelain, and earthen ware	**4,988 [illegible]**
Dyes, drugs, and chemicals	**81,556 [illegible]**
Embroideries	**1,460 [illegible]**
Fancy goods and toys	**23,682 [illegible]**

Fancy paper	2,389	69
Glassware (hollow)	1,957	73
Hatter's fur	21,790	92
Hare's hair	17,552	15
Hair, prepared and raw	20,812	58
Iron	489	29
Lead and zinc	369	64
Leather, hides, and skins	140,569	79
Leather goods	12,198	17
Linen, woolen, and cotton goods	85,121	32
Machinery and tools	5,764	30
Mineral water	11,175	15
Music, musical strings, and instruments	2,987	44
Oil paintings	397	38
Platina wire and plate	13,486	27
Prunes, dried fruits, and nuts	37,595	28
Seeds	1,944	00
Silk and silk goods	1,387	86
Slipper forms	2,029	20
Soaps and perfumery	530	31
Steel (manufactured)	932	86
Sundries	2,770	31
Smokers' articles	7,675	88
Wine and liquors	16,788	40
Total	543,978	95
Total for same quarter in 1882	584,395	89
Decrease	40,416	94

Quarter ending June 30, 1883.

Albums, books, photographs, &c	$15,462	21
Copper and brass	139	23
Clay (for pipes)	10,301	16
Cloth	11,893	67
China, porcelain, and earthenware	19,859	61
Dyes, drugs, and chemicals	67,485	03
Embroideries	1,518	49
Fancy goods and toys	80,015	55
Fancy paper	2,099	22
Glassware (hollow)	3,275	94
Hatters' fur	21,429	75
Hares' hair	28,226	86
Hair, prepared and raw	26,622	70
Instruments	246	36
Lead and zinc	402	34
Leather, hides, and skins	157,206	96
Leather goods	11,926	44
Linen, woolen, and cotton goods	46,793	93
Machinery and tools	8,412	02
Mineral water	54,338	42
Music, musical strings, and instruments	4,591	22
Oil paintings	342	13
Platina wire and plate	6,850	71
Prunes, dried fruits, and nuts	7,873	39
Silk, plush, and silk goods	6,986	60
Smokers' articles	238	00
Slipper-forms	10,368	26
Soaps and perfumery	1,435	18
Sundries	2,066	43
Wine, cherry juice, and liquors	42,130	74
Total	650,538	55
Total for same quarter in 1882	910,156	61
Decrease	259,618	06

FERDINAND VOGELER,
Consul-General.

KEHL.

Quarter ending March 31, 1883.

Books, stationery, printed engravings	$6,501 65
Clocks	357 75
Cotton good (mostly printed)	32,310 10
Drugs, chemicals, paints, color	10,445 55
Glassware, such as watch and spectacle glasses	13,616 00
Hair nets	6,997 75
Hides and leather	121,507 95
Machinery	14,132 10
Paper, fancy goods, buttons, papier-maché ware, &c	7,265 65
Pasteboard goods	2,014 55
Pastries	2,225 70
Porcelain and stoneware	981 70
Silk goods, plushes, ribbons, &c	54,806 45
Snuff	1,631 50
Straw hats	2,903 30
Wine, beer, and brandies	804 95
Wire textures	530 50
Sundries	1,650 30
Total	280,682 90

Quarter ending June 30, 1883.

Books, stationery, printed engravings	$8,959 55
Cotton goods (mostly printed)	8,147 46
Drugs, chemicals, paints, colors	37,830 75
Glassware, such as watch and spectacle glasses	8,881 57
Hair nets	4,750 95
Hides and leather	90,546 50
Household goods	4,480 45
Paper, fancy goods, buttons, papier-maché ware, &c	9,027 85
Pasteboard goods	3,048 75
Pastries	1,472 75
Porcelain and stone ware	1,587 34
Silk goods, plushes, ribbons, &c	52,698 15
Snuff	1,623 48
Wine, beer, and brandies	746 00
Wire textures	606 35
Sundries	2,372 90
Total	236,781 00

FRANK W. BALLOU,
Consul.

MANNHEIM.

Quarter ending March 31, 1883.

Articles of art	$1,062 00
Clocks and clock materials	952 00
Cotton dress-goods, velvets, and furnishings	3,394 10
Drugs, chemicals, paints, oils, colors, &c	429,995 55
Glassware, plate and mirrors	456 90
Household goods	618 95
Land produce	655 15
Leather, mostly calf, kid, and morocco	56,016 35
Machinery, cutlery, and other hardware	267 05
Musical instruments and works	77 00
Paper boxes and hangings	3,556 65
Porcelain ware	131 10
Rags	4,142 25
Smokers' articles	1,785 45
Snuff, cigars, and tobacco	223 75
Stones	2,267 95
Wines and brandies	33,067 10
Woolen and worsted cloths and clothing	118 55
Total	538,790 15

Quarter ending June 30, 1883.

Asphaltum	$18,242	80
Articles of art	166	95
Bed feathers	2,733	20
Clocks and clock materials	292	00
Cotton dress-goods, velvets, and furnishings	19,607	35
Drugs, chemicals, paints, oils, &c	178,567	65
Empty petroleum barrels	283	05
Goldware, mostly jewelry	1,251	50
Household goods	796	70
Land produce, fruits, pastries, preserved meats, cheese, &c	2,739	75
Leather, mostly calf, kid, and morocco	61,741	85
Machinery, cutlery, and other hardware	1,941	40
Musical instruments and works	773	30
Paper ware	473	50
Rags	2,567	55
Smokers' articles	4,181	25
Stones	177	45
Wines and brandies	95,903	60
Woolen and worsted cloths and clothing	4,417	25
Total	396,858	10

WILLIAM KÖSTER, Jr.,
Vice-Consul.

MAYENCE.

Quarter ending June 30, 1883.

Wine and brandy	$265,131	32
Agate ware and imitation jewelry	57,305	98
Leather	50,782	51
Chemicals	34,029	98
Colors	11,893	66
Portland cement	11,748	14
Mineral water	10,329	56
Glue	7,583	98
Oil paintings	4,617	20
Isinglass	4,337	55
Clay pipes	4,145	81
Boneblack	2,446	58
Stoneware	2,010	12
Printed music	1,524	56
Cattle hair	1,508	17
Saws	788	80
Furniture	174	21
Tinfoil	159	64
Quincaillerie	148	93
Wall paper	128	13
Beer	88	49
Total	470,883	32
Total for quarter ending June 30, 1882	470,446	50
Increase	436	82

JAS. HENRY SMITH,
Commercial Agent.

MUNICH.

Quarter ending June 30, 1883.

Articles.	Munich.	Augsburg.
Artificial flowers	$1,246 98	
Books and music		$4,676 [illegible]
Bronze powder	1,949 70	
Chromos	6,285 75	
Dry colors	374 11	
Flix	393 95	
Glass paintings	1,442 04	1,561 [illegible]
Glasswares	1,187 24	1,328 [illegible]
Gold, silver, and metal paper	3,378 76	7,350 [illegible]
Lambskin gloves	20,406 98	
Lithographic stones	5,057 97	
Mathematical instruments		1,227 [illegible]
Musical instruments	958 11	2,667 [illegible]
Oil paintings	55,336 54	
Paper	3,217 88	
Porcelain paintings	1,758 82	
Photographs	511 34	
Shoes	7,578 29	
Skins	2,625 45	
Stained glass	1,085 54	
Statuary	7,354 58	
Springs, files, and tools		4,458 [illegible]
Sundries	522 74	2,465 [illegible]
White cow hairs	779 71	
Tobacco	467 84	
Total	123,872 32	25,653 [illegible]
Total for corresponding quarter in year preceding	75,748 60	27,516 [illegible]
Increase	48,123 72	
Decrease		[illegible]

JOSEPH W. HARPER,
Consul.

NUREMBERG.

Quarter ending June 30, 1883.

Basket and basketware	$50,653 [illegible]
Beads and beadware	4,387 [illegible]
Beer	10,796 [illegible]
Bronze powder and leaf metal	88,325 [illegible]
Buttons	7,962 [illegible]
Colored and fancy paper	18,767 75
Cotton, linen, and woolen goods	22,619 [illegible]
Decalcomania	21,663 [illegible]
Drugs and medicines	1,649 [illegible]
Gas-burners and lava gas-tips	8,885 [illegible]
Hair pencils and brushes	10,765 [illegible]
Lead pencils and lead in pieces	24,360 [illegible]
Leonic ware	17,292 [illegible]
Lithographic stones	25,216 [illegible]
Looking and window glass plates	375,422 [illegible]
Mathematical and physical instruments	9,224 [illegible]
Music wire	8,900 45
Optical goods	11,165 [illegible]
Porcelain, glass and stone ware	19,846 [illegible]
Slates and slate pencils	2,803 [illegible]
Tapestry and embroidery	13,056 [illegible]
Toys and fancy goods	104,494 [illegible]
Ultramarine and other colors	7,390 [illegible]
Wine	3,985 [illegible]
Sundries	21,408 [illegible]
Total	891,155 [illegible]

G. HENRY HORSTMANN,
Consul.

SONNEBERG.

Quarter ending March 31, 1883.

Baskets	$4,426 52
Brass lamps	1,379 86
China goods	96,317 23
Dolls and other toys	29,143 10
Drugs	834 13
Fancy earthenware	1,247 04
Glassware	14,711 38
Guns	7,390 41
Hardware	4,815 60
Hosiery (cotton)	145,517 01
Kid gloves	578 44
Liquors	2,577 42
Mineral water	3,540 01
Miscellaneous	178 98
Musical instruments	5,806 08
Paints	2,063 99
Papier-maché and fancy goods	5,541 34
Barytes	800 46
Seeds, plants, &c	11,507 86
Slate pencils	2,089 81
Smokers' articles	1,280 63
Wafers	153 61
Total	341,001 81
Total for corresponding quarter last year	315,262 59
Increase	26,639 22

Quarter ending June 30, 1883.

Baskets	$1,400 10
Brass lamps	2,110 43
China goods	320,186 78
Dolls and other toys	200,584 29
Drugs	2,549 66
Fancy earthenware	2,270 16
Glassware	13,073 29
Guns	4,388 57
Hardware	2,217 84
Hosiery (cotton)	121,383 87
Liquors	3,100 13
Mineral water	3,540 01
Miscellaneous	111 96
Musical instruments	1,579 50
Paints	7,528 81
Papier-maché and fancy goods	13,296 57
Barytes	423 76
Seeds, plants, &c	415 76
Slate pencils	6,778 79
Smokers' articles	1,520 94
Total	708,461 22
Total for corresponding quarter last year	605,104 45
Increase	103,356 77

GEORGE ORTELLI,
Vice-Consul.

The foregoing statement shows an increase of $103,356.77 in declared exports to the United States over that of the corresponding quarter of last year, and as compared with the exports of preceding years, it shows that there has been a steady increase of trade with the United States since the establishment of the consulate.

The prospect for the coming year is also encouraging. Many American buyers have been in town during the past few months, leaving fairly good orders. The manufacturers generally report a brisk demand for their goods, and they are taxing their ingenuity to improve present articles, invent novelties, and so be able to supply the manifold wants of a large and widening market.

GEORGE F. MOSHER,
Consul.

SONNEBERG, *June 30, 1883.*

STUTTGART.

(No returns.)

RECAPITULATION.

Exports to the United States from the district of the United States consulate-general at Frankfort-on-the-Main, and the consulates subordinate thereto, during the quarter ended June 30, 1883.

Articles.	Aix-la-Chapelle.	Barmen.	Cologne.	Crefeld.	Dusseldorf.
Baskets and basketware					
Brushes and hair pencils					
Bronze powder and leaf metal					
Beads and beadware					
Books, stationery, photographs, and paperware	$8, 682 20		$340 34	$15, 397 33	$392 28
Buttons and button stuffs		$117, 656 84		4, 283 16	3, 363 55
Clay (for pipes)					
China, glass, porcelain, stone, and earthen ware	30, 449 25		18, 837 11		815 71
Cotton dress-goods, velvets, and furnishings					
Corsets					
Cloth	313, 686 28				13, 877 65
Cologne water			2, 447 95		
Decalcomania					
Dyes, drugs, chemicals, &c		49, 679 22	89, 862 36	5, 566 13	21, 289 00
Fancy goods and toys	11, 315 48	24, 095 65			
Fancy paper					
Glass-plate, window and mirror glass					
Glassware (hollow), watch crystals, spectacle glasses, &c					
Gold, silver, and metal paper					
Gas-burners, lava gas-tips, brass lamps					
Hatters' fur					
Hatbands and ribbons		148, 189 89			
Hair, prepared and raw					
Hares' hair					
Instruments					
Jewelry and precious stones					
Kid gloves	4, 732 51				
Lead pencils and lead for pencils					
Leather, hides, and skins			36, 829 61		
Leather goods					
Lead, zinc, and spelter	52, 678 09				
Leonic ware					
Linen, woolen, and cotton goods		240, 703 58		66, 913 31	53, 423 37
Lithographic stones and materials					
Machinery	478 30		3, 716 54	628 32	875 46
Mineral water			111, 342 14		2, 302 88
Music, musical strings, and instruments					
Optical goods					
Oil paintings and chromos				3, 541 28	4, 462 13
Platina wire and plates					
Prunes, dried fruits, nuts, land produce, &c		2, 567 46			
Pins and needles	10, 000 18				
Railway rails, ironware, steel, cutlery, &c	32, 083 60	328, 650 80		75, 115 04	302, 009 65
Seeds, plants, &c					
Slates and slate pencils					
Silk, silk goods, velvets, ribbons, and braids, &c		224, 699 45	122, 049 02	988, 590 61	2, 828 56
Smokers' articles, snuff, cigars, and tobacco					
Soap and perfumery			1, 667 31		
Statuary and sculpture					
Sundries	102 61	10, 365 15	12, 198 38	377 48	3, 765 44
Steel, manufactured and Bessemer			129, 197 32		
Tapestry and embroidery ware, laces					
Wine, brandy, beer, and liquor			30, 806 02	5, 557 00	791 65
Watches, clocks, and watchmen detectors					
Total	464, 208 50	1, 146, 608 04	559, 294 10	1, 165, 969 66	410, 195 33
Total for corresponding quarter in 1882	443, 404 92	1, 308, 822 28	762, 677 88	1, 658, 673 20	388, 148 02
Increase	20, 803 58				22, 047 31
Decrease		262, 214 24	202, 383 78	492, 703 54	

Exports to the United States from the district of the United States consulate-general at Frankfort-on-the-Main, &c.—Continued.

Articles.	Elberfeld.*	Frankfort.	Kehl.†	Mannheim.	Mayence.
Baskets and basket ware					
Brushes and hair pencils					
Bronze powder and leaf metal					
Beads and bead ware					
Books, stationery, photographs, and paper ware		$15,462 21	$8,959 55	$473 50	
Buttons and button stuffs	$2,010 73				
Clay (for pipes)		10,301 16			
China, glass, porcelain, stone, and earthen ware		19,859 61	1,587 34		$2,010 12
Cotton dress-goods, velvets, and furnishings				19,607 35	
Corsets					
Cloth		11,893 67			
Cologne water					
Decalcomania					
Dyes, drugs, chemicals, &c	16,581 86	67,485 03	37,830 75	196,810 45	67,702 34
Fancy goods and toys		80,015 55	9,027 85		
Fancy paper		2,099 22			
Glass-plate, window and mirror glass					
Glassware (hollow), watch crystals, spectacle glasses, &c		3,275 94	8,881 50		
Gold, silver, and metal paper					
Gas-burners, lava gas-tips, brass lamps					
Hatter's fur		21,429 75			
Hatbands and ribbons	18,087 59				
Hair, prepared and raw		26,622 70	4,750 95		1,508 17
Hare's hair		28,226 86			
Instruments		246 36			
Jewelry and precious stones				1,251 50	57,305 98
Kid gloves					
Lead pencils and lead for pencils					
Leather, hides, and skins		157,206 96	90,546 80	61,741 85	50,782 51
Leather goods		11,926 44			
Lead, zinc, and spelter		402 34			
Leonic ware					
Linen, woolen, and cotton goods	76,688 05	57,162 19	8,147 40	4,417 25	
Lithographic stones and materials					
Machinery		8,412 02		1,941 40	
Mineral water		54,338 42			10,329 56
Music, musical strings, and instruments		4,591 22		773 30	1,524 56
Optical goods					
Oil paintings and chromos		342 13		166 95	4,617 20
Platina wire and plates		6,850 71			
Prunes, dried fruits, nuts, land produce, &c		7,873 39	1,472 75	2,739 75	
Pins and needles					
Railway rails, iron ware, steel, cutlery, &c	45,462 65	139 23			
Seeds, plants, &c					
Slates and slate pencils					
Silk, silk goods, velvets, ribbons, and braids, &c	137,594 28	6 986 60	52,698 15		
Smoker's articles, snuff, cigars, and tobacco		238 00	1,623 49	4,181 25	4,145 81
Soap, and perfumery		1,435 18			
Statuary and sculpture					
Sundries	221 10	2,066 43	10,508 47	6,557 95	4,948 46
Steel (manufactured) and bessemer					788 80
Tapestry and embroidery ware, laces		1,518 49			
Wine, brandy, beer, and liquor		42,130 74	746 00	95,903 60	265,219 81
Watches, clocks, and watchmen detectors				292 00	
Total	296,646 26	650,538 55	236,781 00	396,858 10	470,883 32
Total for corresponding quarter in 1882		910,156 61		820,903 05	470,446 50
Increase	296,646 26		236,781 00		436 82
Decrease		259,618 06		424,044 95	

* Established May 10, 1883.

† Established July 18, 1882.

Exports to the United States from the district of the United States consulate-general
Frankfort-on-the-Main, &c.—Continued.

Articles.	Munich.	Nuremberg.	Sonneberg.	Stuttgart.	Total.
Baskets and basket ware		$30, 653 70	$1, 400 10		$52, [illegible]
Brushes and hair pencils		10, 765 90			10, 765 [illegible]
Bronze powder and leaf metal	$1, 949 70	88, 325 15			90, 274 [illegible]
Beads and bead ware		4, 387 40			4, 387 [illegible]
Books, stationery, photographs, and paper ware	8, 406 12			$3, 662 62	61, 77[illegible]
Button and button stuffs		7, 968 80		500 00	135, 78[illegible]
Clay (for pipes)					10, 281 [illegible]
China, glass, porcelain, stone, and earthen ware	2, 511 24	19, 846 00	333, 260 07	3, 638 20	432, 514 [illegible]
Cotton dress-goods, velvets, and furnishings					19, [illegible]
Corsets				106, 908 95	106, 9[illegible]
Cloth					339, 45[illegible]
Cologne water					2, 447 [illegible]
Decalcomania		21, 663 35			21, 6[illegible]
Dyes, drugs, chemicals, &c	374 11	9, 030 10	[illegible]10, 078 47	24, 027 25	[illegible], 317 [illegible]
Fancy goods and toys		104, 494 30	[illegible]16, 151 02	1, 147 82	446, 2[illegible]
Fancy paper		18, 767 75			20, [illegible]
Glass-plate, window and mirror glass		375, 428 60			375, 43[illegible]
Glassware (hollow), watch crystals, spectacle glasses, &c					12, 157 [illegible]
Gold, silver, and metal paper	10, 729 56				10, 729 [illegible]
Gas-burners, lava gas-tips, brass lamps		8, 888 00	2, 110 43		10, [illegible]
Hatter's fur					21, 429 [illegible]
Hatbands and ribbons					166, 277 [illegible]
Hair, prepared and raw	779 71				33, 68[illegible]
Hare's hair					25, 236 [illegible]
Instruments	1, 227 00	9, 224 70			10, [illegible]
Jewelry and precious stones			423 76	2, 475 00	61, 456 [illegible]
Kid gloves					4, 72[illegible]
Lead pencils and lead for pencils		24, 360 25			24, 3[illegible]
Leather, hides, and skins	2, 625 45			1, 246 71	400, [illegible]
Leather goods	27, 987 27				39, 913 [illegible]
Lead, zinc, and spelter					53, 0[illegible]
Leonic ware		17, 298 30			17, 29[illegible]
Linen, woolen, and cotton goods		22, 819 80	121, 383 87	8, 412 88	[illegible], 071 [illegible]
Lithographic stones and materials	5, 057 97	25, 216 90			30, 274 [illegible]
Machinery	4, 458 60				[illegible], 516 [illegible]
Mineral water			3, 540 01		181, 653 [illegible]
Music, musical strings, and instruments	3, 606 01	8, 800 45	1, 579 50	3, 572 68	24, 447 [illegible]
Optical goods		11, 165 30			11, 165 [illegible]
Oil paintings and chromos	61, 622 29			728 57	73, 4[illegible]
Platina wire and plates					6, [illegible]
Prunes, dried fruits, nuts, land produce, &c				40, 364 13	55, 017 [illegible]
Pins and needles					10, [illegible]
Railway rails, iron ware, steel, cutlery, &c			6, 606 41	67 12	790, 134 [illegible]
Seeds, plants, &c			415 76	204 62	[illegible]
Slate and slate pencils		2, 803 60	6, 778 79		9, 58[illegible]
Silk, silk goods, velvets, ribbons, and braids, &c					1, 535, 444 [illegible]
Smoker's articles, snuff, cigars, and tobacco	467 84		1, 520 94		12, 17[illegible]
Soaps and perfumery					3, 1[illegible]
Statuary and sculpture	7, 354 58				7, 3[illegible]
Sundries	10, 368 37	21, 408 95	111 96	5, 606 01	88, [illegible]
Steel (manufactured) and bessemer					129, [illegible]
Tapestry and embroidery ware, laces		13, 056 90		1, 188 33	15, 7[illegible]
Wine, brandy, beer, and liquor		14, 781 70	3, 100 13	1, 289 62	[illegible]
Watches, clocks, and watchmen detectors				2, 522 62	2, 81[illegible]
Total	149, 525 82	891, 155 90	708, 461 22	207, 563 13	7, 754, [illegible]
Total for corresponding quarter in 1882	103, 265 13	843, 869 80	605, 104 45	196, 677 12	8, 512, 14[illegible]
Increase	46, 260 69	47, 286 10	103, 356 77	10, 886 01	
Decrease					757, [illegible]

FERDINAND VOGELER,
Consul-General.

FRANKFORT-ON-THE-MAIN, *June* 30, 1883.

CONSULATE GENERAL OF BERLIN.

(The district of the consulate-general of Berlin, embraces the following consulate districts and their agencies: Annaberg, Berlin, Bremen, and agencies at Geestemünde, Bremerhaven, Brake and Nordenhamm, Breslau, Brunswick, Chemnitz, Dresden; Hamburg and agencies at Altona, Kiel, Lübeck, and Ritzebüttel and Cuxhaven; Leipsic and agency at Gera; Stettin and agencies at Dantzig and Königsberg.)

ANNABERG.

First quarter, 1883.

Buttons and button covers	$20,332 00
Dress trimmings	163,780 00
Embroideries	41,326 00
Kid gloves	61,410 00
Laces	23,391 00
Musical goods	220,280 00
Sundries	2,273 00
Total	532,792 00
Total first quarter 1882	417,251 00
Increase	115,541 00

Second quarter, 1883.

Buttons and button goods	$26,918 00
Dress trimmings	314,784 00
Embroideries	17,679 00
Kid gloves	14,765 00
Laces	16,236 00
Musical goods	150,014 00
Sundries	4,241 00
Total	544,637 00
Total for second quarter, 1882	203,949 00
Increase	340,688 00

GEO. E. BULLOCK,
Consul.

BERLIN.

Quarter ending March 31, 1883.

Accordeons	$17,697 46
Albums	42,205 63
Artificial flowers	10,529 13
Basket and cane ware	2,107 35
Books	2,809 15
Buttons	44,803 72
Chemicals	66,737 80
China and glassware	2,668 83
Chromos	1,871 09
Clothes, ready made	373,178 24
Colors	3,001 78
Dress and piece goods:	
Cotton and cotton mixed	14,202 53
Silk and silk mixed	4,927 06
Linen and linen mixed	26,263 90
Wool and woolen mixed	124,080 30
Velvet and velvet mixed	6,141 05
Embroideries	1,330 80
Engravings	1,049 85
Fancy goods, notions and toys	50,480 50
Gloves, leather, cotton, &c	71,141 49
Glucose	5,440 83
Human hair	3,120 75

Instruments:	
Musical	$3,662
Scientific	8,230
Jewelry	409
Lamps	1,302
Leathers:	
Manufactures of	7,258
Skins, hides	15,836
Liquors, malt and distilled	5 745
Lithographs and chromolithographs	738
Metal ware	10,170
Machines	575
Moldings	3,885
Paintings	13,327
Paper and manufactures of	7,019
Photographs	1,458
Photo- and electroplates	335
Plushes	11,889
Rags, scrap paper, and scrap metal	21,777
Rennets	1,191 76
Trimmings	11,849
Worsted yarn, dyed	30,398
Miscellaneous	23,966
Total	1,058,410
Total of preceding year, for corresponding quarter	1,024,419
Increase	33,990

Quarter ending June 30, 1883.

Accordeons	$88,391
Alabaster	436
Albums	149,638
Amber	680
Books	2,261
Buttons	34,714 61
Bristles, bags, baskets	14,011
Chemicals	80,577
China, porcelain, &c	27,344
Chromos	4,193
Clothes, ready made	184,762 41
Colors	12,455
Dress and piece goods:	
Cotton and cotton mixed	2,284
Silk and silk mixed	17,577
Linen and linen mixed	8,455
Wool and woolen mixed	143,157
Velvet and velvet mixed	61,843
Dress shields	1,358
Embroideries	3,736
Engravings	2,352
Fancy feathers	84,824
Fancy goods, notions, &c	10,563
Gloves of leather, silk, and cotton	55,414
Human hair	940
Instruments:	
Musical	8,238
Scientific	16,660
Jewelry	500
Lamps	3,048
Leather:	
Manufactures	16,145
Skins and salted hides	20,553
Liquors, rennets, and beet	11,661
Linseed oil	213
Metals and manufactures of metals	29,421
Paintings	10,555
Paper and manufactures of paper	57,635
Photographs	23,538
Plushes	120,534

Rags and scrap metals	$29,226	45
Trimmings	4,241	43
Worsted yarns, dyed and undyed	66,351	93
Miscellaneous	75,074	26
Total for quarter ending June 30, 1883	1,310,441	46
Total for same quarter of preceding year	1,087,455	50
Increase	222,985	96

MARK S. BREWER,
Consul-General.

BREMEN.

Quarter ending March 31, 1883.

Apparatus and instruments	$9,879	14
Asphaltum	2,506	85
Barrels, empty	210,679	27
Books, music, pictures, &c	19,692	60
Drugs, paints, chemicals, &c	45,157	17
Glass, china, earthenware, &c	45,748	84
Metals, including old iron	33,883	82
Miscellaneous	4,684	55
Provisions, dried fruits, &c	25,361	04
Rags and paper stock	12,158	94
Tobacco and cigars	94,288	46
Willow, straw, and wooden ware	6,641	39
Wines, liquors, beer, &c	17,814	78
Woolen goods	9,426	47
Total	537,923	32
Total for same quarter 1882	691,860	53
Decrease	153,937	21

Quarter ending June 30, 1883.

Apparatus and instruments	$6,415	52
Barrels, empty	138,052	37
Books, music, pictures, &c	25,409	12
Drugs, paints, chemicals, &c	39,208	36
Glass, china, earthenware, &c	51,894	00
Metals, &c	61,263	34
Miscellaneous	8,410	20
Provisions	21,132	50
Rags	10,907	30
Tobacco and cigars	113,375	11
Willow, straw, and wooden ware	7,042	66
Wine, liquors, beer, &c	35,432	49
Woolen goods	7,700	97
Total	526,243	94
Total for same quarter, 1882	367,360	61
Increase	158,883	33

JOHN M. WILSON,
Consul.

BREMERHAVEN-GEESTEMUNDE.

Quarter ending March 31, 1883.

Barrels, empty	$109,289	08
Beer	5,185	14
Birds and animals	12,071	44
Chirurgical instruments and chemicals	1,931	80
Clay	4,874	88
Cotton, linen-mixed goods	7,157	07
Color, dry	405	14
Effects, personal	233	33
Heath brooms	390	71

Kainit, crude	$15,293
Miscellaneous	3,284
Muriate of potash	16,814
Steel rods	161,225
Total	338,159
Same quarter last year	569,834
Increase	231,675

Quarter ending June 30, 1883.

Beer in casks	$6,222
Birds and animals (live)	5,293
Brooms	605
Clay, raw and burnt	2,046
Cotton and woolen mixed goods	7,565
Chirurgical instruments and chemicals	11,455
Drugs	3,627
Glass, hollow	736
Iron ware	408
Miscellaneous	122
Steel rods, Bessemer	110,580
Rollers	1,776
Barrels, empty	100,304
Total	250,676
Same quarter, 1882	343,065
Decrease	92,389

GERH. IHLDER,
Consular Agent.

BRESLAU.

Quarter ending March 31, 1883.

Linen, half-linen, and cotton goods	$153,969
Woolen goods	3,470
Leather gloves	70,470
Glove leather	12,752
Fur linings	1,974
Porcelain ware	8,220
Glass ware	3,966
Sheet zinc	19,759
Spelter	24,655
Tin foil	1,047
Cherry-juice, liqueurs, &c	2,758
Chemists' earthenware	235
Miscellaneous	700
Total	303,976

Quarter ending June 30, 1883.

Linen, half-linen, and cotton goods	$77,733
Woolen goods	2,913
Leather gloves	31,579
Glove leather	12,438
Fur linings	2,102
Glassware	4,337
Porcelain and earthen ware	14,957
Sheet zinc	7,254
Spelter	55,657
Tin foil	1,759
Toys	2,537
Cherry-juice	1,770
Miscellaneous	1,503
Total	216,517

HENRY DITHMAR,
Consul.

BRUNSWICK.

Quarter ending March 31, 1883.

Books, printed music	$2,678	00
Chemicals, dyes, ink, &c	33,398	62
Chicory	18,857	88
China, glass, and earthen ware	3,901	61
Feathers	1,516	18
Fruit juice	18,210	94
Hosiery of cotton, silk, and wool	23,825	83
India-rubber goods	8,002	45
Leather gloves	36,770	53
Looking-glass plates	2,654	29
Manure salt	108,893	99
Metalware, machinery	7,401	76
Miscellaneous	3,064	46
Musical instruments	4,368	46
Optical glasses	8,061	50
Paper, manufactures of	2,284	56
Portland cement	17,480	92
Prepared vegetables	1,556	88
Provisions	794	59
Rags	11,441	53
Raw skins	6,541	89
Toys, fancy goods	17,841	62
Worsted yarn dyed	740	05
Total	340,288	54

Quarter ending June 30, 1883.

Books, printed music	$7,144	25
Chemicals, dyes, ink, &c	103,084	05
Chicory	23,770	25
China, glass, and earthen ware	12,940	52
Cotton velvets	12,081	31
Feathers	1,153	66
Fruit juice	23,067	98
Gelatine	1,015	69
India-rubber goods	6,098	69
Leather and leather gloves	24,184	92
Manure salt	180,899	74
Metal ware	29,304	74
Miscellaneous	4,659	19
Musical instruments	9,730	88
Optical glasses	2,740	91
Portland cement, asphalt	13,579	51
Rags	12,626	22
Raw beet sugar	12,731	82
Toys, fancy goods	47,267	40
Worsted yarn dyed	2,353	62
Total	530,435	35

WILLIAM C. FOX,
Consul.

CHEMNITZ AND AGENCY.

(Agency: Glauchau.)

CHEMNITZ.

Second quarter, 1882.

Chemicals	$7,357	94
Cotton yarn	4,305	59
Damasks	15,507	88
Dress goods	122,176	40
Dress trimmings	190,651	05

Embroideries	$45,530
Fancy goods	15,502
Gloves, cotton	219,520
Gloves, kid	62,650
Gloves, silk	12,571
Gloves, wool	62,229
Hose, cotton	655,075
Hose, silk	13,025
Hose, wool	7,175
Laces	27,623
Machinery	1,443
Miscellaneous	147,022
Musical goods	175,155
Toys	25,906
Total	1,840,934

Second quarter, 1883.

Chemicals	85,884
Cotton yarn	3,509
Damasks	18,863
Dress goods	66,694
Embroideries	121,063
Gloves, cotton	215,350
Gloves, silk	45,357
Gloves, wool	142,639
Hose, cotton	846,982
Hose, silk	30,952
Hose, wool	2,119
Machinery	3,041
Miscellaneous	30,201
Musical goods	14,165
Toys	20,797
Total	1,574,446
Decrease	266,488

F. C. ZIMMERMAN,
Acting Consul.

GLAUCHAU AGENCY.

Quarter ending March 31, 1883.

Dress goods	$187,739
Embroideries	34,773
Fancy goods	942
Gloves, cotton	8,043
Gloves, kid	1,249
Gloves, silk	963
Hosiery, cotton	226,847
Hosiery, silk	9,072
Hosiery, wool	112
Miscellaneous	1,366
Total	471,151

Quarter ending June 30, 1883.

Dress goods	$66,696
Embroideries	44,961
Gloves, cotton	462
Gloves, silk	24
Gloves, wool	1,405
Hose, cotton	102,112
Hose, silk	3,852
Hose, wool	391
Miscellaneous	26
Total	219,936

C. BORNGRÄBER,
Consular Agent.

CREFELD AND AGENCY AT ESSEN.

	Quarter ending June 30, 1883.	Quarter ending June 30, 1882.	For the year ending June 30, 1883.	For the year ending June 30, 1882.
rticles of art, oil paintings, &c	$3,541 28		$9,308 98	
aids, bindings, and trimmings				
ıttons and button stuffs	4,283 16	$2,507 33	11,925 65	$11,789 72
ınvas for embroidery	377 48	561 64	1,045 82	987 14
tton goods	4,324 89	1,325 76	15,303 34	14,848 43
ıemicals and dyes	5,566 13	12,532 04	50,098 56	45,966 40
quors and wines	5,557 00	4,062 89	20,161 65	17,871 08
iscellaneous			272 73	
ush goods	90,286 29	557,331 06	880,567 43	
ush and velvet goods (totals for year 1882)				2,235,828 28
per-ware and labels	15,397 33	18,845 31	76,635 37	60,131 81
w silk				2,226 55
bbons:				
Velvet	12,604 53	3,649 56	69,524 70	4,848 57
All silk			8,176 55	6,398 44
Half silk	5,063 91	12,509 47	24,661 04	39,207 19
k goods	29,726 82	22,287 41	198,320 52	173,387 37
k and cotton mixed goods	243,558 42	283,372 20	1,087,565 61	1,152,482 77
earine and tallow				9,134 88
eel and iron machinery, wires, &c	628 32	2,482 02	2,391 90	12,435 98
eel rails, steel blooms, forgings, &c	75,115 04	423,232 60	404,033 37	1,725,091 38
lvet goods	607,350 64	313,973 91	1,819,224 30	
oolen goods	62,588 42		67,306 15	
Total	1,165,969 66	1,658,673 20	4,746,523 67	5,512,635 99
Total during preceding year	1,658,673 20		5,512,635 99	
crease				
crease	492,703 54		766,112 32	

The above returns include the exports from the agency at Essen, hich was established April 1, 1883.

J. S. POTTER,
Consul.

DRESDEN.

Quarter ending March 31, 1883.

tificial flowers	$2,487 91
oks	1,308 48
garettes and tobacco	1,986 71
rugs	12,210 95
ıncy goods	4,080 94
ass, porcelain, and china ware	41,171 76
ıces and dress trimmings	1,882 81
nen and half-linen goods	95,095 33
usical instruments and music ware	4,081 55
d metals	2,709 23
intings and photographs	505 75
per and paperware	1,819 70
otographic paper	30,367 06
raw plaits and straw goods	1,303 41
atch movements	3,387 93
oolen goods	32,856 31
iscellaneous	5,895 77
Total	243,151 60
Total for the first quarter, 1882	268,151 36
crease	24,999 67

Quarter ending June 30, 1883.

tificial flowers	$138 04
oks	666 87
garettes and tobacco	2,728 61
rugs	12,348 85

Egg albumen and yelks	$2,674
Fancy goods	10,946
Glass, porcelain, and china ware	69,425
Laces and dress trimmings	3,365
Linen and half-linen goods	31,735
Musical instruments and music ware	8,192
Old metals	755
Paintings and photographs	2,490
Paper and paperware	7,462
Photographic paper	43,012
Straw plaits and straw goods	1,622
Watch movements	542
Woolen goods	15,311
Miscellaneous	8,295
Total	222,297
Total for the second quarter, 1882	190,153
Increase	32,144

JOS. T. MASON,
Consul.

HAMBURG AND AGENCIES.

(Agencies: Altona, Kiel, Lübeck, and Ritzebuttel and Cuxhaven.)

HAMBURG.

Quarter ending June 30, 1883.

Baskets and cane-ware, whipsticks, &c	$54,756
Beet, grape, and raw sugar	23,482
Bristles, feathers, and horse-hair	78,442
Canned meats and fish	1,666
Chemicals, drugs, dyes, paints, &c	181,172
China, earthen, and glass ware	27,183
Cotton, and cotton-mixed goods	14,846
Diamonds and jewelry	26,845
Dried fruits and vegetables	20,582
Fancy goods, toys, and notions	10,139
Grain, plants, and seeds	131
Human hair	5,234
India and hard rubber goods	67,319
Ivory and ivory goods	43,590
Leather and other gloves	39,332
Liquors, wines, and beer	28,995
Manure salt	85,522
Metal and metal ware	45,675
Miscellaneous	7,334
Musical instruments, parts	14,622
Paper and manufactures of paper	3,335
Percussion and blasting caps	13,867
Portland cement	1,646
Raw hides, skins, and leather	25,567
Rags, waste paper, old metal, &c	38,536
Rennets, guts, and bladders	13,753
Tobacco and cigars	5,402
Woolen and woolen-mixed goods	40,765
Zinc and spelter	16,656
Total for quarter	839,2[illegible]
Total for same quarter in 1812	1,250,6[illegible]
Decrease	311,[illegible]

J. M. BAILEY,
Consul.

ALTONA AGENCY.

Quarter ending June 30, 1883.

Chair cane	$1,306	30
Cotton, linen, and woolen goods	3,288	47
Drugs, dyes, and chemicals	2,978	10
Dextrine	10,900	40
Fish, meats, vegetables, and salt	6,335	25
Fruit and fruit juice	775	94
Glass, porcelain, and earthen ware	2,771	50
Hair cloth	339	62
Human hair and buffalo hair	10,027	70
India and hard rubber goods	5,845	94
Iron and steel	42,916	02
Manure salt	34,102	08
Natural-history specimens	3,066	63
Machines	4,527	61
Printed books, paper, cards, chromos, and oil paintings	2,764	15
Portland cement	18,637	69
Rags, waste paper, and other paper stock	13,636	07
Rollers for embroidery patterns	3,990	78
Tobacco (raw)	2,253	00
Wild animals, birds, and snakes	7,338	96
Zinc oxide	2,370	71
Miscellaneous	2,937	42
Total	183,110	44

PAUL MÖLLER,
Consular Agent.

KIEL AGENCY.

Quarter ending June 30, 1883.

Portland cement	$70,833	53
Glazed paper	1,296	00
Used household effects (beds, clothes, pictures, &c.)	121	48
Total	72,251	01

AUGUST SARTORI,
Consular Agent.

LÜBECK AGENCY.

Quarter ending June 30, 1883.

Household wares and furniture	$426	13

J. MEYER, JR.,
Consular Agent.

LEIPSIC AND AGENCY.

(Agency: Gera.)

LEIPSIC.

Quarter ending March 31, 1883.

Books	$39,107	26
Bristles	42,458	24
Cotton and linen goods	44,346	08
Drugs	11,821	06
Essential oils	11,329	03
Furs and skins	139,507	76
Kid and lambskin gloves	189,468	91
Laces and trimmings	43,348	88
Machinery and iron ware	2,323	83
Musical and other instruments	33,772	84
Music	10,486	30

Newspapers	16,686
Toys and fancy ware	9,120
Woolen goods	278,730
Miscellaneous	37,191
Total	909,694
Corresponding quarter in preceding year	812,959
Increase	96,735

FREDERICK NACHOD,
Vice and Acting Consul.

Quarter ending June 30, 1883.

Books	$43,504
Bristles	32,045
Cotton and linen goods	40,536
Drugs	9,949
Essential oils	22,535
Furs and skins	265,446
Kid and lambskin gloves	68,517
Laces and trimmings	14,561
Machinery and iron ware	4,346
Musical instruments	36,452
Music	12,990
Newspapers	15,371
Toys and fancy ware	18,526
Woolen goods	158,427
Half woolen goods	3,302
Miscellaneous	44,686
Total	793,831

O. V. TOUSLEY,
Consul.

GERA AGENCY.

Quarter ending March 31, 1883.

Woolen dress goods	$208,110
Musical instruments	18,689
Leather gloves	35,547
Piano leather	5,646
Shoe findings	2,813
Chinaware	1,537
Dried flowers and grasses	2,548
Seeds	548
Paints	1,202
Miscellaneous	547
Total	277,172

Quarter ending June 30, 1883.

Woolen dress goods	$85,940
Musical instruments	19,523
Leather gloves	14,757
Chinaware	5,424
Piano leather	1,980
Dried natural flowers	1,510
Shoe findings	1,439
Miscellaneous	2,639
Total	133,406

CHARLES NEUER,
Consular Agent.

STETTIN AND AGENCIES.

(Agencies: Dantzic and Königsberg.)

STETTIN.

Qnarter ending March 31, 1883.

Potash	$459 70
Colza-oil	1,423 29
Steel file scrap	324 58
Cement	5 21
Hemp	2,412 72
Rags	6,215 82
Chemicals	66 63
Cherry-juice	881 17
Amber goods	617 37
Total	$12,405 49

GEO. F. LINCOLN,
Consul.

Quarter ending June 30, 1883.

Amber goods	$2,352 71
Cattle hair	459 47
Cement	10,937 78
Cherry-juice	23,424 31
Clothes, ready made	142 41
Oil of bitter almonds	103 17
Rags	9,419 94
Scrap-iron	7,735 00
Spelter	7,794 00
Woolen goods	108 90
Zinc oxide	1,875 61
Total	64,353 30

JULIUS DITTMER,
Vice-Consul.

DANTZIC AGENCY.

Quarter ending June 30, 1883.

Old rags	$4,082 50
Petroleum barrels	2,995 77
Wrought scrap-iron	3,014 00
Total	10,092 27
Corresponding quarter 1882	6,703 35
Increase	3,388 92

PETER COLLAS,
Consular Agent.

KÖNIGSBERG AGENCY.

Quarter ending March 31, 1883.

Amber, raw	$3,291 88
Bristles	11,207 77
Hemp	9,855 18
Metals	1,816 85
Rags	159,069 63
Seeds	17,506 70
Total	202,748 01

Quarter ending June 30, 1883.

Amber, raw	$1,545 [illegible]
Bristles	11,5[illegible]
Fruit juice	4,0[illegible]
Hemp	49,0[illegible]
Metals	113 [illegible]
Rags	116,[illegible]
Seeds	1,06[illegible]
Total	185,111 [illegible]

CONRAD H. GADEKE,
Consular Agent.

THE NETHERLANDS.

AMSTERDAM.

Quarter ending March 31, 1883.

Cacao butter	$2,045 [illegible]
Diamonds	66,530 [illegible]
Empty petroleum barrels	12,061 [illegible]
Fish	2,481 [illegible]
Gums	7,[illegible]
Indigo	3,942 [illegible]
Potato flour	2,454 [illegible]
Rags	6,[illegible]
Rubber	4,142 [illegible]
Spices	3,513 [illegible]
Sundries	6,584 [illegible]
Tobacco, Sumatra and Java	530,455 [illegible]
Coffee	72,076 [illegible]
Gin and liqueurs	10,[illegible]
Hides	7,1[illegible]
Vegetables	3,745 [illegible]
Rice	22,146 [illegible]
Seeds	6,322 [illegible]
Tin	81,706 [illegible]
Total	854,[illegible]

Quarter ending June 30, 1883.

Cattle	$7,400 [illegible]
Coffee	78,7[illegible]
Diamonds	68,719 [illegible]
Empty petroleum barrels	15,8[illegible]
Gin and liqueurs	18,25[illegible]
Gums	10,713 [illegible]
India rubber	104,5[illegible]
Rags	7,754 [illegible]
Rice	37,44[illegible]
Seeds	2,[illegible]
Spices	24,4[illegible]
Sundries	15,2[illegible]
Tin	4,919 [illegible]
Tobacco	1,765,0[illegible]
Total	2,159,2[illegible]

D. ECKSTEIN,
Consul.

ROTTERDAM AND AGENCIES.

(Agencies: Flushing and Schiedam.)

ROTTERDAM.

Quarter ending March 31, 1883.

Articles.	January.	February.	March	Total.
Capsules	$439 04	$576 80	$143 70	$1,159 54
Cheese	12,430 09	3,538 04	4,262 80	20,230 94
Coffee	1,006 26		18,747 82	19,754 08
Flax	21,364 01	21,429 77	29,087 38	79,881 16
Gin	5,401 88	3,103 10	7,180 57	15,685 55
Glycerine	8,272 86	25,836 50	9,868 21	43,977 57
Herring	4,960 80	4,894 07	977 80	10,832 77
Hides	1,610 06	2,457 70	3,090 01	7,157 77
Iron	24,309 78	112,545 16	2,542 18	139,397 12
Madder	2,075 35	14,091 97	2,549 12	18,716 44
Petroleum barrels	48,976 84	7,784 82	28,967 62	85,792 28
Pipes	346 60		492 20	838 80
Plants	306 00		570 56	876 56
Rags	2,375 28	997 20	4,620 00	6,992 48
Rattans			280 12	280 12
Sour-krout		400 00		400 00
Tin	10,232 25	1,458 60	1,562 98	13,253 83
Tobacco	4,100 57	7,230 28	197 42	11,328 27
Seed	2,172 80	572 80	640 00	3,385 60
Wine	834 08		62 80	696 88
Others	336 00	3,436 44	112 00	4,882 44
Total	151,550 55	210,353 35	115,755 30	477,659 20

JNO. F. WINTER,
Consul.

BELGIUM.

ANTWERP.

Quarter ending March 31, 1883.

Articles.	January.	February.	March.	Total.
Books	$214 09	$826 42		$1,040 51
Beans	3,628 40			3,628 40
Cattle		3,643 24		3,643 24
Cement			$1,737 00	1,737 00
Colors			1,042 75	1,042 75
Chicory	270 60	713 87	1,040 80	2,025 27
Church ornaments			269 56	269 56
Drugs	3,431 42	1,306 00	832 26	5,570 28
Extract of meat	19,289 03	20,381 29	17,546 18	57,216 50
Furniture and objects of art		230 06	346 44	576 50
Gelatine		752 86		752 86
Hides and skins	11,121 35	18,943 49	27,164 22	57,229 06
Horses	1,621 20			1,621 20
Iron beams	8,516 13	10,167 35	8,545 30	27,228 78
Iron nails			1,536 09	1,536 09
Lap robes	3,670 37	3,597 19	5,497 45	12,765 01
Oil		108 98		108 98
Paper and parchment	4,321 65	2,008 88	3,780 73	10,111 26
Pictures	3,336 97	6,257 83	5,651 62	15,246 42
Rags	734 60	787 45		1,522 05
Rope	321 96			321 96
Sand	1,675 05	286 61	626 48	2,588 14
Steel crop ends		16,596 99		16,596 99
Steel rods	300,700 49	408,852 09	416,001 74	1,125,554 32
Steel wire		12,290 08	16,011 51	28,301 59
Stone	728 92	16,191 45	13,718 71	30,639 08
Sugar	7,589 43			7,589 43
Textile fabrics	11,390 54	11,208 39	9,923 16	32,522 09
Wax			6,988 03	6,988 03
Willows	530 75	530 75	646 55	1,708 05
Window glass		10,652 96		10,652 96
Wine and gin		89 47	128 05	217 52
Sundries	1,307 74	1,898 57	1,742 37	4,948 68
Total	384,400 69	548,322 87	540,777 00	1,473,500 56

Quarter ending June 30, 1883.

Articles.	April.	May.	June.	Total.
Books		$395 04	$330 84	$725 88
Brimstone			4, 946 02	4, 946 02
Cattle		11, 724 75	16, 791 00	28, 515 75
Camel's hair		1, 627 48		1, 627 48
Cement	$1, 737 00	5, 203 49		6, 940 49
Chicory			9, 889 76	9, 889 76
Coals			2, 867 06	2, 867 06
Crockery	1, 242 44		2, 526 96	3, 769 40
Drugs	1, 580 05	3, 521 47	954 18	6, 055 70
Extract of meat	9, 429 15	7, 076 45	10, 240 33	26, 745 93
Furniture and objects of art			1, 090 85	1, 090 85
Glue			741 99	741 99
Glycerine	15, 250 90			15, 250 90
Gum	1, 092 05			1, 092 05
Hides and skins	6, 607 16	6, 119 45	26, 103 83	38, 830 44
Horses	1, 737 00		2, 431 80	4, 168 80
Iron beams	8, 731 58	12, 462 68	11, 538 12	32, 732 38
Iron rods	2, 987 05			2, 987 05
Iron scrap			13, 413 43	13, 413 43
Lap robes		821 83	294 97	1, 116 80
Liqueurs		572 44		572 44
Paper and parchment	865 99	1, 206 11	5, 123 99	7, 196 09
Pictures	1, 913 11	4, 551 13	9, 854 58	16, 318 82
Potato flour	2, 632 52		3, 133 06	5, 765 58
Steel bar		232 42		232 42
Steel crop ends		8, 040 99		8, 040 99
Steel rods	616, 269 89	295, 918 19	311, 971 67	1, 224, 159 75
Steel wire	14, 242 17	12, 351 51	10, 020 75	36, 614 43
Stone	682 16			682 16
Textile fabrics	1, 479 90	3, 090 91	899 77	5, 470 58
Tobacco	201 40		1, 773 75	1, 975 15
Wax	2, 645 74			2, 645 74
Willows			2, 077 16	2, 077 16
Window glass	14, 018 11	1, 097 86	21, 239 84	36, 355 81
Wine and gin	983 18		469 05	1, 452 23
Wire nails	2, 723 45	2, 677 40	414 40	5, 815 25
Wool		350 17		350 17
Woolen goods		204 18	4, 233 39	4, 437 57
Sundries	1, 011 37	293 00	13, 135 52	14, 439 89
Total	710, 063 37	379, 538 95	488, 508 07	1, 578, 110 39

JOHN H. STEUART,
Consul.

BRUSSELS AND AGENCY.

(Agency: Charleroi.)

BRUSSELS.

Quarter ending March 31, 1883.

	Francs
Lace goods	324, 064 94
Rabbit-skins and hatters' furs	263, 673 [illegible]
Linen goods	243, 216 64
Gloves	227, 542 14
Hops	216, 474 48
Plate glass	210, 157 33
Corsets	166, 844 56
Vegetable fiber	81, 044 55
Tin, in sheet and foil	41, 607 [illegible]
Aniline colors	40, 153 96
Woolen goods	35, 563 [illegible]
Satin goods	16, 290 [illegible]
Paintings	13, 538 [illegible]
Harness and leather goods	23, 015 75
Miscellaneous goods	10, 564 35
Total Brussels	1, 914, 809 64

	Francs.
Charleroi:	
Window glass	2,073,905 83
Plate glass	351,320 77
Iron	32,410 47
Total	4,372,437 71
Total	$843,880 48

AUG. SNEYERS,
Vice-Consul.

Quarter ending June 30, 1883.

	Francs.
Rabbit-skins and hatters' furs	711,145 64
Plate and window glass	456,904 49
Lace goods	391,069 23
Linen goods	194,922 49
Gloves	146,887 27
Corsets	110,639 85
Oil paintings	79,546 68
Woolen goods	64,942 82
Vegetable fiber	54,313 80
Tin, in sheet and foil	47,083 84
Scrap iron	43,618 28
Satin goods	15,607 70
Wines	17,305 05
Aniline	16,517 37
Miscellaneous goods	17,400 20
Total Brussels	2,367,904 71
Charleroi:	
Window glass	1,932,102 77
Plate glass	179,871 64
Glassware	1 243 84
Iron	2,233 90
Total	4,483,356 86
Total	$865,294 47

ADOLPH STEIN,
Vice-Consul.

CHARLEROI AGENCY.

Quarter ending March 31, 1883.

	Francs.
Window glass	2,073,905 83
Plate glass	351,320 77
Iron	32,410 47
Total	2,457,637 07

Quarter ending June 30, 1883.

	Francs.
Window glass	1,932,102 77
Plate glass	179,871 64
Glassware	1,243 84
Iron	2,233 90
Total	2,115,452 15

CH. VANDER ELST,
Consular Agent.

GHENT AND AGENCY.

(Agency: Ostend.)

GHENT.

Quarter ending March 31, 1883.

Bristles	$2,615
Chicory	1,160
Flax	2,560
Human hair	826
Liquors	353
Manufactured goods	8,490
Paper bags	50
Rabbit hair and skins	85,952
Rags	25,343
Ultramarine blue	330
Total	127,683

Quarter ending June 30, 1883.

Chicory	$4,171
Flax	1,695
Manufactured goods	1,340
Plants	85
Rabbit hair and skins	143,145
Rags, ropes, and paper stock	22,840
Total	173,278

ALFRED LEFEBVRE,
Vice-Consul.

OSTEND AGENCY.

Quarter ending March 31, 1883.

Photographic glass	$96

Quarter ending June 30, 1883.

Marble works	$500

A. J. NEUTS,
Consular Agent.

THE UNITED KINGDOM.

ENGLAND.

BIRMINGHAM AND AGENCIES.

(Agencies: Redditch, Kidderminster, and Wolverhampton.)

BIRMINGHAM.

Quarter ending March 31, 1883.

Anvils and vises	$30,537
Buttons, shell, &c	77,334
Boot materials	4,095
Chains, hoes, and scythes	14,433
Chemicals and phosphorus	43,752
Fancy goods and jewelry	72,548
Glass, porcelain, &c	50,801
Guns and materials	139,106
Hardware, cutlery, steel, and iron	191,107
Metal for sheathing, &c	40,889
Nickel and cobalt	349
Pens and tips	30,683
Saddlery and skins	38,415
Sundries	2,002
Total for Birmingham	736,058

REDDITCH AGENCY.

Needles, fishing-tackle, &c	$103,876 82

KIDDERMINSTER AGENCY.

Salted skins, chamois, &c	$105,353 73
Carpets and rugs	45,324 10
China and glass	16,740 18
Hardware	6,233 08
Sauce	5,310 56
Linen yarn	5,115 76
Tin plates	1,673 83
Sundries	3,849 00
Total for Kidderminster	189,600 24

WOLVERHAMPTON AGENCY.

Cotton ties, &c	$60,692 32
Iron sheets, roofing, &c	27,661 68
Tiles, pottery, &c	5,739 38
Hardware	1,427 35
Glue	2,562 21
Cloth remnants	133 82
	98,216 76
Total for Birmingham and district	1,127,752 14
Total for corresponding quarter, 1882	1,118,944 33
Increase	8,807 81

Quarter ending June 30, 1883.

Anvils and vises	$16,476 16
Buttons, shell, &c	72,427 44
Boot materials	6,707 91
Chains, hoes, and scythes	15,114 73
Chemicals and phosphorus	44,916 68
Fancy goods and jewelry	78,099 68
Glass, porcelain, &c.	50,646 42
Guns and materials	210,171 75
Hardware, cutlery, steel, and iron	256,244 67
Metal for sheathing, &c	20,991 00
Nickel and cobalt	9,003 15
Pens and tips	28,220 97
Saddlery and skins	36,835 27
Sundries	11,892 35
Total for Birmingham	857,748 18

REDDITCH AGENCY.

Needles, fish-hooks, tackle, &c	$78,360 30

KIDDERMINSTER AGENCY.

Salted skins and chamois	$88,279 81
China and glass ware	28,257 33
Sauce	6,195 65
Linen yarn	5,123 94
Carpets and rugs	2,650 37
Sundries	2,226 56
Total for Kidderminster	132,733 66

WOLVERHAMPTON AGENCY.

Sheet iron, tin sheets iron, &c	$32,852 18
Cotton ties	61,991 79
Tiles	6,119 99
Glue	7,598 84

Hardware	$1,82
Machinery	99
Opticals	15
Total	111,53

Total for Birmingham and district	1,180,37
Total for corresponding quarter, 1882	1,257,80
Decrease	77,42

WILSON KING,
Consu

BRADFORD.

Quarter ending March 31, 1883.

Buttons	$8
Camel's hair	14,08
Card clothing	7,15
Carpets	45,94
Chemicals	5,34
Cotton goods	1,31
Cow hair	1,19
Damasks	36
Elastic web	25
Hair cloth	33,66
Iron and steel	11,64
Leather	6,12
Machinery	43,73
Miscellaneous	28
Mohair (goat's hair)	7,40
Nails	8,23
Oil	38
Paper	1,76
Reeds and healds	48
Salted skins	15,40
Shawls	46
Silk goods	24,48
Stuffs	1,519,83
Waste	109,33
Wool	347,03
Woolen goods	46,67
Worsted coatings	215,07
Yarns	19,33
Total	2,487,14

Quarter ending June 30, 1883.

Carpets and rugs	$40,86
Camel's hair	5,73
Card clothing	7,39
Cotton goods	12,16
Chemicals	5,83
Damasks, &c	2,62
Hair cloth	27,217
Iron and steel	22,397
Leather	7,05
Miscellaneous	79
Machinery	70,067
Mohair (goat's hair)	10,98
Nails	4,20
Paper	1,77
Reeds and healds	575
Salted skins	4,44
Shawls	4,33
Silk waste	7,19
Spun silk, silk yarn, &c.	18,34
Stuffs (principally coat and sleeve linings)	304,49
Wool	154,97

Woolen goods	$54,429 60
Worsted coatings	254,240 68
Waste	71,375 65
Yarn	34,921 60
Total	2,128,464 82

WILLIAM F. GRINNELL,
Consul.

BRISTOL.

Quarter ending March 31, 1883.

Books	$973 28
Cloths	4,555 54
Currants	2,801 30
Chemicals	9,704 16
Cocoa	3,109 89
Cordage	579 29
Calf-skins	2,578 58
Fish lines	1,192 39
Floor cloth	1,211 54
Glue	4,439 41
Hides	4,160 21
Iron (scrap)	6,813 10
Iron (oxide)	835 64
Paper stock	3,359 90
Sausage casings	673 40
Miscellaneous	587 43
Total	47,575 06

Quarter ending June 30, 1883.

Books	$2,912 00
Bricks	2,190 11
Chocolate	6,804 23
Chemicals	6,950 00
Cordage	744 38
Earthenware	568 75
Floor cloths	1,210 95
Paper stock	2,173 73
Tin plates	8,307 14
Wines	313 75
Miscellaneous	1,391 29
Total	33,566 38

LOREN A. LATHROP,
Consul.

FALMOUTH AND AGENCY.

(Agency: Scilly Islands.)

FALMOUTH.

Quarter ending March 31, 1883.

2,035 tons China clay	$16,302 59

Quarter ending June 30, 1883.

1,100 tons China clay	$9,100 25

HOWARD FOX,
Consul.

GLOUCESTER.

Quarter ending March 31, 1883.

Machinery and ironware	$4,731	[illegible]
Rose trees, &c	158	[illegible]
Salt	4,879	[illegible]
Tin plates	18,316	[illegible]
Woolen goods	19,223	[illegible]
Miscellaneous	162	[illegible]
Total	47,467	[illegible]

JOHN DAVIES,
Commercial Agent.

HULL.

Quarter ending March 31, 1883.

Ale	$38,872	[illegible]
Black salts	12,107	[illegible]
Bristles	2,412	[illegible]
Cliff stone	2,771	[illegible]
Cattle hair	12,949	[illegible]
Coals	2,193	[illegible]
Colors	13,823	[illegible]
Calf-skins	9,608	[illegible]
Crude phenyl acid	1,798	[illegible]
Electro plate	138	[illegible]
Grease	1,388	[illegible]
Jet	44	[illegible]
Leather	1,353	[illegible]
Manure salts	732	[illegible]
Music	127	[illegible]
Paper stock	2,273	[illegible]
Soap stock	946	14
Washing blue	340	[illegible]
Total	103,877	[illegible]

Quarter ending June 30, 1883.

Ale and beer	$27,009	[illegible]
Black salts	15,042	[illegible]
Bristles	4,183	[illegible]
Cattle and cow hair	10,060	[illegible]
Clothing	52	[illegible]
Cliff stone	506	[illegible]
Chemical salts	1,275	[illegible]
Colors	29,757	14
Ginger ale	226	[illegible]
Grease	685	[illegible]
Hemp	1,271	[illegible]
Machinery	12,546	[illegible]
Paper stock	1,015	[illegible]
Soap stock	724	[illegible]
Show cards	685	[illegible]
Skins	5,447	[illegible]
	110,574	[illegible]

EDWARD HOWARD,
Commercial Agent.

LEEDS AND AGENCY.

(Agency: Huddersfield.)

LEEDS.

Quarter ending March 31, 1883.

Almanacs	$405	68
Bricks	7,190	58
Bundles, bars, and steel tires	5,945	26
Burners (gas)	1,616	24
Carpet wool, cattle hair, and noils	26,332	90
Chemicals	17,628	92
Cloths (union and wool)	20,761	32
Earthenware	4,531	70
Economizers	9,610	00
Grease	1,123	24
Hardware	100	00
Instruments (astronomical)	583	84
Leather	6,030	72
Linens	17,234	50
Machinery	22,624	08
Oil (sod)	815	76
Pitch	4,583	52
Pins (round and flat)	213	00
Protectors (boot)	45	58
Plough	1,085	24
Skins	19,632	46
Sundries	4,707	66
Steam hammer	6,179	66
Thread	10,132	88
Thread and yarn	28,377	84
Teazles	192	76
Twines	761	76
Woolens	58,808	94
Worsteds	65,368	48
Worsteds and woolens	2,610	48
Whetstones	837	24
Waste	9,290	22
Yarn	10,862	00
Total	366,224	46

Quarter ending June 30, 1883.

Almanacs	3,624	54
Ale finings	40	96
Bricks	3,077	82
Bricks and tiles	1,697	96
Bundles and bar iron	2,263	48
Casting and pipes	978	92
Cattle hair, &c	16,405	04
Chemicals	19,548	50
Cloths (union and wool)	15,256	92
Earthenware	3,178	62
Economizers	10,325	96
Gas-burners	1,881	54
Glue	622	90
Grease	5,542	82
Grindstones and whetstones	367	78
Leather	9,360	92
Linens	10,530	38
Machinery	26,373	18
Oil (sod)	1,007	16
Pins (round and flat)	118	80
Sealskins	187	88
Skins	29,752	86
Sundries	2,155	74
Teazles	778	80

Threads	$45,912 22
Twines	212 15
Waste	7,038 36
Woolens	68,313 [illegible]
Worsteds	62,945 [illegible]
Worsteds and woolens	2,915 34
Yarns	22,376 [illegible]
Total	374,843 56

A. V. DOCKERY,
Consul.

HUDDERSFIELD AGENCY.

Quarter ending June 30, 1883.

Bricks	$1,093 12
Calf hair	2,915 79
Card coverings	523 66
Chemicals and dyes	20,343 66
Chinese goods	1,522 00
Cottons	13,120 55
Cottons and mohair	45,835 14
Cottons, mohair, and silk	10,763 29
Cottons and silk	1,971 00
Cottons (sewing)	17,029 53
Fustians	7,942 62
Goat hair	5,364 79
Mohair	18,321 25
Plushes	2,560 66
Shawls	4,233 13
Woolens	292,495 45
Woolens and cottons	7,065 91
Woolens and silk	2,270 06
Woolens and worsteds	6,041 35
Worsteds	50,538 51
Yarn	2,375 56
Machinery	405 34
Miscellaneous	971 60
Total	515,914 30

C. W. WHITMAN,
Consular Agent.

LIVERPOOL AND AGENCY.

(Agencies: Holyhead and St. Helens.)

LIVERPOOL.

Quarter ending March 31, 1883.

Beer	$37,935 [illegible]
Chemicals	1,465,756 06
Coal	103,236 [illegible]
Dry goods	19,007 [illegible]
Earthenware and glass	161,318 [illegible]
Fruit and vegetables	250,175 [illegible]
Machinery	6,257 [illegible]
Hemp	14,588 [illegible]
India rubber	37,670 [illegible]
Iron	92,329 [illegible]
Jute bags and canvas	34,682 [illegible]
Leather and skins	410,590 [illegible]
Rags and waste paper	215,355 [illegible]
Salt	292,796 [illegible]
Slates and tiles	7,695 [illegible]
Steel	224,129 [illegible]
Tin plates	1,544,555 19

Tin	$20,116 09
Wire rope	10,034 41
Wool	630,662 57
Wood	19,358 13
Pig iron	245,152 84
Cement	25,708 91
Yellow metal	6,554 72
Grease and oils	26,370 95
Private effects	9,440 20
Paint and varnish	3,635 27
Wines and spirits	2,326 17
Cotton	152,972 10
Seed and plants	14,471 84
Granite	729 97
Hardware	58,298 60
Rice	224,573 36
Provisions	4,185 17
Hair	91,434 76
Cattle	111,534 10
Iron ore	3,002 63
Books and stationery	2,856 62
Tea and coffee	3,708 26
Felt	4,803 22
Precious metal	14,453 48
Manure	6,944 39
Tar	1,080 36
Carriages	462 31
Straws	861 36
Ginger	228 72
Elephants' teeth	6,695 49
Barytes	1,761 66
Drugs	21,046 30
Grindstones	467 18
Sugar	22,448 90
Silk noils	2,793 37
Gum	10,481 79
Barrels	5,119 04
Diamonds	1,002 49
Total	7,051,885 26
Total for previous quarter ending December 31, 1882	8,524,504 37
Decrease compared with previous quarter	1,472,619 11
Total for corresponding quarter ending March 31, 1882	8,275,113 55
Decrease compared with corresponding quarter	1,223,228 29

Quarter ending June 30, 1883.

Beer	$47,695 16
Chemicals	1,674,604 03
Coal	133,642 36
Dry goods	8,905 68
Earthenware and glass	250,067 15
Fruit and vegetables	90,490 95
Machinery	4,589 09
Hemp and flax	1,484 28
India rubber	690,657 48
Iron	131,310 90
Jute bags and canvas	31,402 57
Leather and skins	255,990 89
Rags and waste paper	235,400 38
Salt	277,826 97
Slates and bricks	16,034 55
Steel	180,872 68
Tin plates	2,365,128 72
Tin	25,636 06
Wire rope	36,390 23
Wool	459,444 95
Wood	17,650 24
Pig iron	414,493 23
Cement	128,755 89

Yellow metal	$18,21[illegible]
Grease and oils	13,[illegible]
Private effects	8,65[illegible]
Paint and varnish	2,4[illegible]
Wine and spirits	7,12[illegible]
Cotton	24,3[illegible]
Seed	2,715 [illegible]
Granite	[illegible]
Hardware	171,280 [illegible]
Rice	167,35[illegible]
Provisions	2,73[illegible]
Hair	90,665 [illegible]
Cattle	95,500 [illegible]
Books and stationery	3,975 [illegible]
Tea and coffee	7,440 [illegible]
Felt	2,27[illegible]
Precious metal	16,240 [illegible]
Manure	301 [illegible]
Elephants' teeth	6,66[illegible]
Shells	2,55[illegible]
Straws	63[illegible]
Wax	65 [illegible]
Saddlery	1,15[illegible]
Drugs	9,91[illegible]
Silk noils and waste	10,[illegible]
Mineral water	139 [illegible]
Carriages	1,01[illegible]
Barrels	11,0[illegible]
Ginger	14[illegible]
Minerals	5,689 [illegible]
Ship stores	715 [illegible]
Oatmeal	243 [illegible]
Millstones	301 [illegible]
Sugar	7,78[illegible]
Total	8,173,210 [illegible]
Total for previous quarter ending March 31, 1883	7,051,[illegible]
Increase compared with previous quarter	1,121,32[illegible]
Total for corresponding quarter ending June 30, 1882	8,4[illegible],[illegible]
Decrease compared with corresponding quarter	3[illegible]6,[illegible]

S. B. PACKARD,
Consul.

LONDON AND AGENCY.

(Agency: Dover.)

LONDON.

Quarter ending March 31, 1883.

Beer, wine, and spirits	$213,7[illegible]
Chemicals, sodas, &c	520,[illegible]
Books and stationery	467,06[illegible]
Dry goods, silk, woolens, cottons, laces, &c	1,830,[illegible]
Machinery and hardware	5,9[illegible]
Iron, steel, metals, &c	3,559,13[illegible]
Leather, hides, skins, furs, &c	1,070,03[illegible]
Rags and paper waste	173,796 [illegible]
Wool	364,065 [illegible]
Raw silk	364,065 [illegible]
Tea	19,963 [illegible]
Clothing	33,115 [illegible]
Precious stones	617,513 [illegible]
Hops	11,06[illegible]
Seeds	121,67[illegible]
Feathers	400,961 [illegible]
Miscellaneous	2,576,96[illegible]
Total	11,966,99[illegible]

Quarter ending June 30, 1883.

Beer, wine, and spirits	$102,190 66
Chemicals, sodas, &c	410,874 03
Books and stationery	554,591 76
Dry goods, silk, woolens, cottons, laces, &c	773,453 83
Machinery and hardware	37,272 97
Iron, steel, metals, &c	4,397,423 39
Leather, hides, skins, furs, &c	1,311,101 12
Rags and paper waste	221,198 44
Wool	273,660 99
Raw silk	5,710 84
Tea	55,680 55
Clothing	35,615 34
Precious stones	569,350 21
Hops	4,145 32
Seeds	31,294 15
Feathers	624,872 63
Miscellaneous	2,282,776 68
Total	11,691,212 91

E. A. MERRITT,
Consul-General.

MANCHESTER.

Quarter ending June 30, 1883.

Mixed goods	$140,343 57
Cottons	1,588,230 98
Chemicals	309,283 16
Rags and junk	159,405 85
Machinery	497,173 49
Worsted stuffs	56,694 86
Leather and hides	26,803 05
Wool	112,774 68
Linens	183,250 44
Hosiery	150,162 65
Carpets	14,133 53
Iron	29,027 19
Silk	163,434 27
Paper	12,210 42
Steel	15,863 33
Rugs, mats, and miscellaneous	80,792 60
Granite	4,356 77
Musical instruments	3,310 60
Seal skins and furs	11,274 30
Total	3,558,525 74

ALBERT D. SHAW,
Consul.

NEWCASTLE-ON-TYNE AND AGENCIES.

(Agencies: Carlisle, Old Hartlepool, and Sunderland.)

NEWCASTLE-UPON-TYNE.

Quarter ending March 31, 1883.

Antimony	$35,129 68
Bricks (fire)	2,396 28
Carpets	5,292 60
Cement	851 61
Chemicals	69,741 10
Coals	16,287 00
Furs and skins (hatters,)	27,414 76
Glass	24,097 61
Grindstones	3,109 72
Gypsum (included in chemicals).	
Iron pigs	19,911 04
Leather (dressed)	3,877 28

Paints and Venetian red	$12,815
Rags and old rope	4,995
Soda, bicarbonate, ash, salts of, &c	128,536
Miscellaneous	9,297
Total	363,754

Quarter ending June 30, 1883.

Antimony	$44,250
Bricks (fire)	5,721
Carpets	2,311
Cement	11,677
Chemicals	37,654
Coals	2,027
Furs and skins (hatters')	62,477
Glass	13,954
Grindstones	2,546
Gypsum (included in chemicals).	
Iron and steel rails, &c	7,401
Leather	10,806
Paints and Venetian red	41,215
Rags and paper-making material	6,506
Soda, bicarbonate, ash, salts of, &c	153,655
Miscellaneous	1,449
Total	402,995

EVAN R. JONES,
Consul.

CARLISLE AGENCY.

Quarter ending March 31, 1883.

Cotton, manufactures of	$45,933
Iron pigs and spiegel	16,580
Steel rails	18,336
Stone, building	2,923
Thread, linen	636
Trees, young	1,192
Total	85,542

Quarter ending June 28, 1883.

Cotton, manufactures of	$39,832
Spiegel	8,753
Steel rails	137,796
Stone, building	1,065
Thread, linen	2,57[illegible]
Woolen goods (gloves)	2,455
Total	192,41[illegible]

J. HEWETSON BROWN,
Consular Agent.

OLD HARTLEPOOL AGENCY.

Quarter ending March 31, 1883.

Patterns, hoists, and chains	$351
Coals	2,304
Pig iron	6,569
Bicycle	51
Oxalic acid	941
Steel rails and fish-plates	27,583
Wire rods	11,[illegible]
Lost in decimals	
Total	49,02[illegible]

Quarter ending June 30, 1883.

Chemicals (oxalic acid)	$2,283 03
Coals (gas)	1,320 03
Sweeping-machines	799 31
Pig iron	12,409 57
Hoists and chains	124 86
Bloom ends	1,411 28
Ferro manganese	2,870 07
Crude acid product for sheep-wash	267 64
Steel rails and fish-plates	62,620 67
Spiegeleisen	72,792 75
Ware, stone and China earthenware	368 65
Wire rope, Bessemer steel wire rods	34,854 77
Total	192,122 63

C. NIELSON,
Consular Agent.

SUNDERLAND.

Quarter ending June 30, 1883.

Glass	$1,778 39
Wire rope	661 60
Total	2,439 99

JAMES HORAN,
Consular Agent.

NOTTINGHAM AND AGENCIES.

(Agencies: Derby and Leicester.)

NOTTINGHAM.

Quarter ending March 31, 1883.

Lace goods	$1,842,963 00
Hosiery	557,307 00
Muslins	8,477 50
Linens	29,846 00
Ale	3,752 00
Elastic goods	53,988 50
Machinery	14,371 00
Salted skins	142,167 16
Silk	7,635 00
Oxide of iron	3,304 00
Cottons	32,046 00
Woolens	10,254 00
China and earthenware	1,226 00
Leather	19,850 00
Colors	16,040 00
Miscellaneous	7,114 50
Total	2,750,341 66

Quarter ending June 30, 1883.

Lace goods	$838,902 00
Hosiery	265,186 00
Muslins	5,806 50
Linens	6,306 50
Elastic goods	37,710 00
Machinery	9,559 00
Salted skins	161,638 00
Silk	4,273 00
Oxide of iron	8,542 00
Cottons	3,279 00
China and earthenware	7,080 00
Leather	32,518 00
Colors	10,017 00
Miscellaneous	7,035 50
Total	1,397,852 50

JASPER SMITH,
Consular Agent.

PLYMOUTH AND AGENCIES.

(Agencies: Dartmouth, Guernsey, and Jersey.)

PLYMOUTH.

Quarter ending March 31, 1883.

Woolen goods	$366 75
China clay	19,865 79
Peruvian guano	4,546 39
Vegetable pitch	124 49
Brushes	231 [illegible]
Shrubs and flower roots	77 74
A carriage	155 72
Heifers for breeding purposes	1,703 [illegible]
Total	27,073 1[illegible]

Quarter ending June 30, 1883.

China clay	$9,977 39
A black Newfoundland dog for breeding purposes	146 00
Bricks	486 65
Vegetable pitch	502 95
Cattle for breeding purposes	76,535 6[illegible]
Total	87,646 2[illegible]

HENRY FOX,
Consul.

SHEFFIELD.

Quarter ending March 31, 1883.

Steel	$415,906 66
Bessemer steel rails	98,395 73
Bessemer steel blooms	9,902 94
Steel springs	2,643 62
Iron bars	3 12
Anvils	1,561 [illegible]
Cutlery	305,313 33
Wooden, electro-plated, and other table ware	1,029 [illegible]
Files	13,746 41
Saws	24 [illegible]
Edge and other tools	12,19[illegible] [illegible]
Garden tools	2,090 24
Scythes	623 [illegible]
Sickles and grass hooks	1,686 40
Sheep shears	19,884 55
Umbrella ribs	5,975 [illegible]
Shooting tackle and gun furniture	852 [illegible]
Dog collars and couples	25 74
Measuring tapes and chains, straight edges and rules	5,965 6[illegible]
Magnets	563 [illegible]
Optical goods	254 [illegible]
Brass goods, church furniture	456 [illegible]
Copper plates for engraving	942 63
Graining combs	958 [illegible]
Needles	391 [illegible]
Tenter hooks	93 [illegible]
Salted skins	74,117 41
Glue	16,966 [illegible]
Grease	534 55
Wax	4 62
Hair seating	909 53
Grindstones	1,397 [illegible]
Millstones	93 1[illegible]
Hansom cab and harness	474 [illegible]
Sherry wine	164 [illegible]
Stationery and books	274 [illegible]
Umbrella handles, horn	438 [illegible]
Sundries	984 [illegible]
Total	995,955 [illegible]

Quarter ending June 30, 1883.

Steel	$441,314 73
Bessemer steel rails	38,557 17
Bessemer steel blooms	31,493 61
Steel springs	378 11
Anvils	2,670 51
Stove-grates	167 78
Cutlery	331,677 55
Electro-plated, wooden, and other table-ware	504 48
Files	25,924 38
Saws	45 72
Edge and other tools	10,769 88
Garden tools	1,921 73
Sythes	158 71
Sickles and grass-hooks	368 27
Sheep shears	5,812 18
Umbrella ribs	1,297 25
Shooting tackle and gun furniture	452 52
Measuring tapes, land chains and rules	8,050 22
Surgical instruments	55 48
Optical goods	560 56
Magnets	206 48
Brass goods—church furniture	200 09
Copper plates for engraving	49 15
Rigging chain	133 04
Screws, bolts, and nuts	522 88
Tenter hooks	24 66
Brooches, horn	36 99
Rat-traps	5 51
Grindstones	5,439 32
Crucible clay	100 46
Hair seating	1,481 86
Salted skins	62,137 31
Leather, polishing	10 16
Glue	18,536 23
Buffalo-horn tips	360 61
Sheep-wash	3,172 39
Paper	61 32
Brandy	293 60
Sundries	392 57
Total	995,345 47

C. B. WEBSTER,
Consul.

SOUTHAMPTON AND AGENCIES.

(Agencies: Portsmouth and Weymouth.)

SOUTHAMPTON.

Quarter ending March 31, 1883.

Live stock	$7,324 08
Bristles	789 10
Live plants	272 52
Manufactured goods	210 40
Wearing apparel	118 00
Bibles	166 43
Total	8,880 53

Quarter ending June 30, 1883.

Live stock	$37,987 89
Lace	357 60
Wearing apparel	138 69
Total	38,484 18

WM. THOMSON,
Consul.

TUNSTALL.

Quarter ending June 30, 1883.

Earthenware	$1,434,931
China	49,666
Majolica	50,280
Tiles	22,182
Parian	2,479
Colors	2,501
Paper	1,233
Machinery	4,335
Potters' materials	1,602
Cotton fabrics	423
Porcelain	95
Total	1,569,731

EDWARD E. LANE,
Consul.

IRELAND.

BELFAST AND AGENCIES.

(Agencies: Ballymena and Lurgan.)

CORK AND AGENCY.

(Agency: Waterford.)

CORK.

Quarter ending June 30, 1883.

Whisky	$435
Goat-skins	510
Sausage-casings	262
Salt hides	2,530
Feathers	3,211
Calf-skins	7,066
Total	14,0

JOHN J. PIATT,
Consul.

DUBLIN AND AGENCIES.

(No returns.)

LONDONDERRY.

Quarter ending March 31, 1883.

Vehicle and saddlery	$335
Whiskies	535
Household goods	510
Total	1,3

A. LIVERMORE,
Consul.

SCOTLAND.

DUNDEE AND AGENCY.

(Agency: Aberdeen.)

DUNDEE.

Quarter ending March 31, 1883.

Burlaps	$908,146	51
Linens	695,893	58
Yarn	143,124	11
Hemp	2,623	68
Bags	13,983	11
Whisky	879	30
Padding	392	81
Flax	21,269	84
Clothing	123	25
Paper-stock	65,109	26
Pressing rollers	173	99
Old sacks	34	96
School-bags	2,054	58
Gauge glasses	2,655	11
Canvas	612	08
Steam coal	17,103	75
Old machinery	714	23
Scrim	254	95
Oakum	561	01
Carpets	2,097	68
Twine	169	73
Towels	2,907	91
Tow	3,636	23
Sail duck	3,658	24
Silk	73	55
Double banding	421	24
Lantern-slides	164	66
Jute	1,511	08
Plants	271	21
Horse blanketing	342	81
Personal effects, piano, and picture	146	01
Total	1,891,110	46

Quarter ending June 30, 1883.

Burlaps	$1,114,438	48
Yarn	214,498	54
Linens	502,924	83
Paper stock	50,646	45
Towels	561	22
Flax	9,208	44
Jute	6,305	74
Tow	37,108	22
Whisky	199	28
Bagging	887	15
Canvas hose	129	46
Bags	6,038	28
School-bags	3,092	82
Books on chess and other games	230	55
Sail duck	2,712	50
Gauge-glasses	3,336	08
Carpets	1,427	69
Horse-blanketing	2,011	04
Hemp	8,670	68
Oakum	2,254	59
Jute rugs	540	24
Decorticator machine	109	51
Pig iron	5,414	54
Total	1,972,746	33

WILLARD B. WELLS,
Consul.

ABERDEEN AGENCY.

Quarter ending March 31, 1883.

Polished granite	$17,491
Linen manufactures	15,114
Paper manufactures	4,130
Woolen manufactures	1,289
Tweed manufactures	1,034
Whisky	1,109
Total	40,169

Quarter ending June 30, 1883.

Polished granite	$28,001
Linen goods	16,355
Woolen goods	6,568
Paper goods	2,680
Spirits	62
Total	53,667

JOHN RAMSAY,
Consular Agent.

DUNFERMLINE AND AGENCY.

(Agency: Aberdeen.)

DUNFERMLINE.

Quarter ending March 31, 1883.

Linen goods	$502,359
Cotton goods	95,403
Floor oil-cloth	38,181
Total	635,944

Quarter ending June 30, 1883.

Linen goods	$302,815
Cotton goods	86,776
Floor oil-cloth	29,461
Total	419,055

H. RAY MYERS,
Commercial Agent.

GLASGOW AND AGENCY.

(Agency: Greenock.)

GLASGOW.

Quarter ending March 31, 1883.

Thread	$463,683
Cotton and linen goods	393,107
Woolen goods	39,302
Muslins	217,397
Laces and trimmings	201,064
Carpets	25,051
Hats and caps	12,217
Furs and skins	10,274
Fishing gut	12,141
Books	3,139
Pig iron	362,975
Machinery and ironware	25,641
Wire goods	6,768

Gum and paints	$17,538	30
Paper and paper stock	34,093	36
Granite and stone goods	2,426	16
Wines and liquors	9,422	58
Beer	7,187	14
Scrap iron and steel	16,444	16
Tobacco pipes (clay)	11,563	56
Shawls	35,262	40
Fire-clay goods	1,932	75
Chemicals	199,473	74
Glass and earthen ware	26,188	58
Horses	42,951	90
Miscellaneous	77,271	52
Total	2,254,508	88

Quarter ending June 30, 1883.

Thread	$1,141,473	60
Cotton and linen goods	260,816	15
Woolen goods	14,929	22
Muslins	204,725	80
Laces and trimmings	112,824	72
Carpets	30,381	90
Hats and caps	22,466	26
Furs and skins	15,726	16
Fishing gut	5,152	68
Books	3,212	22
Pig iron	254,526	00
Machinery and iron-ware	22,961	58
Wire goods	10,748	22
Gum and paints	24,558	04
Coals	1,657	90
Paper and paper stock	44,204	32
Granite and stone goods	852	66
Wines and liquors	7,799	25
Beer	8,730	75
Scrap iron and steel	7,056	04
Tobacco pipes (clay)	11,141	99
Shawls	21,904	62
Fire-clay goods	20,340	02
Chemicals	156,822	70
Glass and earthen ware	36,104	56
Horses	45,540	00
Miscellaneous	89,919	04
Total	2,576,576	40

BRET HARTE,
Consul.

LEITH AND AGENCY.

(Agency: Galashiels.)

LEITH.

Quarter ending March 31, 1883.

Ale	$9,774	12
Alum	1,437	32
Biscuits	2,527	60
Books	61,115	88
Brass wire cloth	118	87
Canvas shoes	611	15
Cement	954	87
Chromo views	215	65
Coal	22,492	27
Fruit-tree stocks	217	49
Gelatine	21,283	27
Glassware	202	08
Glue	558	55

Grass seed	$54
Iron castings	3,21
Linens	14
Maps	1,85
Medicines	3,76
Morphia	2,81
Nets	53
Oatmeal	70
Oil paintings	28
Oxalic acid	2,70
Paper stock	21,42
Preserved provisions	2
Printing materials	89
Trees	13
Velvet	31
Waterproof coats	13
Whisky	59
Wine	28
Wool	4,72
Total	166,60

Quarter ending June 30, 1883.

Aerated waters	$21
Ale	18,04
Alum	24
Biscuits	1,53
Books	38,82
Brandy	17
Cement	2,86
Clothing	12
Coals	8,44
Engravings	57
Fishing nets	1,68
Gelatine	31,61
Glassware	33
Grindstones	19
Maps and atlases	4,49
Medicinal preparations	3,10
Millstones	10
Morphia	6,59
Oatmeal	77
Oxalic acid	1,36
Paper stock	17,34
Preserved provisions	36
Printing materials	3,55
Saponifying oil	1,44
Stereotype plates	48
Trees and plants	23
Velvets	62
Vulcanite	56
Waterproof coats	4,24
Whisky	75
Total	150,94

J. A. LEONARD,
Consu

GALASHIELS AGENCY.

Quarter ending March 31, 1883.

Woollen goods, being tweed cloth	$58,23

Quarter ending June 30, 1883.

Woollen goods, being Scotch tweed cloth	$20,45

RICHARD LEES,
Consular Agen

WALES.

CARDIFF AND AGENCIES.

(Agencies: Llanelly, Milford Haven, Newport, and Swansea.)

CARDIFF.

Quarter ending March 31, 1883.

Steam coal	$17,003	25
Six Jersey cows	2,916	00
Steel rails, fish plates	5,013	55
Total	24,932	80

Quarter ending June 30, 1883.

Steel rails	$39,259	32
Fish plates, iron spikes, bolts, and iron bridge work	19,197	00
Galvanized telegraph wire	6,123	60
One shaping machine	364	50
Total	64,944	42

WILLIAM WIRT SIKES,
Consul.

LLANELLY AGENCY.

Quarter ending March 31, 1883.

Tin plates	$19,437	25

Quarter ending June 30, 1883.

Tin plates, &c	$10,130	90

B. JONES,
Consular Agent.

NEWPORT AGENCY.

Quarter ending March 31, 1883.

Roofing tiles	$57	54
Salt	2,488	76
Homo. rods	14,832	24
Tin and terne plates	115,725	42
Steel rails	34,639	22
Machinery	374	22
Sheet iron	8,431	40
Bicycle	37	64
Black taggers	4,860	92
Total	181,447	36

Quarter ending June 30, 1883.

Tin and terne plates	$126,839	94
Black taggers	3,894	86
Sheet iron	13,702	26
Homo. rods	6,929	92
Machinery	106	92
Rails and bridge work	56,997	96
Total	208,471	86

W. E. HEARD,
Consular Agent.

SWANSEA AGENCY.

Quarter ending March 31, 1883.

Oxalic acid	$8,933 [illegible]
Tin plates	30,330 64
Manganese	2,845 [illegible]
Bricks	4,230 [illegible]
Steel plates	31[illegible] [illegible]
Shoes and dies	4,391 31
Ladles	562 [illegible]
Coal	1,036 [illegible]
Zinc cake	2,642 [illegible]
Rottenstone	396 [illegible]
Indigo auxiliary	279 [illegible]
Total	55,968 [illegible]

Quarter ending June 30, 1883.

Tin plates	$25,094 [illegible]
Manganese	9,370 92
Bricks	2,131 [illegible]
Rottenstone	1,302 31
Coal	5,528 62
Indigo auxiliary	465 51
Cement	29 [illegible]
Oxalic acid	8,126 [illegible]
Total	52,059 [illegible]

JOHN ANGEL,
Consular Agent.

FRANCE.

BORDEAUX AND AGENCIES.

(Agencies: Panillac and Pau.)

BORDEAUX.

Quarter ending March 31, 1883.

Argols and tartar	$438,073 30
Brandy	31,806 [illegible]
Calf skins	10,706 24
Corks	375 [illegible]
Drugs and medicine	6,965 [illegible]
Dye	42 [illegible]
Glass	1,643 [illegible]
Gum	674 [illegible]
Hardware	1,638 [illegible]
Miscellaneous	98,261 [illegible]
Oils	49,542 [illegible]
Preserves and dried fruit	27,616 [illegible]
Preserved meat and sardines	45,430 [illegible]
Prunes	83,490 [illegible]
Rags and paper	5,125 91
Vinegar	3,176 [illegible]
Wine	403,721 [illegible]
Wool	3,511 [illegible]
Total	1,512,100 47

Quarter ending June 30, 1883.

Argols and tartar	$106,563 [illegible]
Bottles and glass	1,920 [illegible]
Brandy	32,545 [illegible]
Calf skins	12,149 [illegible]
Corks	266 11
Drugs and medicine	9,994 64
Gum	445 [illegible]

Miscellaneous	$74,002 96
Oils	48,740 24
Preserves and dried fruit	22,352 21
Preserved meat and sardines	52,162 76
Prunes	1,626 38
Rags and paper	8,708 26
Vinegar	1,429 39
Wines	632,906 73
Total	1,006,454 57

GEO. W. ROOSEVELT,
Consul.

HAVRE AND AGENCIES.

(Agencies: Brest, Cherbourg, Honfleur, and St. Malo.)

Quarter ending March 31, 1883.

Books and engravings	$781 56
Calf skins, leather, and hides	13,246 36
Cheese	3,661 86
Church ornaments and metallic trimmings	25 00
Corks	9,618 68
Drugs and medicines	12,317 81
Dye stuffs	19,546 05
Feathers and flowers, artificial	12,683 82
Furniture and cabinet woods	360 00
Guano	60,664 55
Gloves	3,175 38
Glue	1,699 39
Hair, human	7,225 53
Hardware, machinery, rails, pig-iron, and zinc	18,241 80
Hats and hatters' goods	1,156 50
Linen goods	1,888 52
Millstones, plaster, and cement	11,794 30
Miscellaneous	5,717 35
Musical instruments	426 81
Oils	3,145 29
Ores	838 36
Paints	653 95
Preserved fruits and vegetables	16,589 95
Prunes, raisins, nuts, &c	1,240 84
Rags and old paper	3,318 29
Seeds and plants	8,131 26
Straw goods	1,211 25
Sugar and confectionery	18,109 15
Toilet articles and perfumery	22,222 44
Willows	1,112 00
Wines and liqueurs	10,567 56
Woolen cloth	1,290 41
Total	272,612 02

Quarter ending June 30, 1883.

Books and engravings	$195 00
Brandy	647 93
Calf skins, leather, and hides	8,298 62
Cheese	3,608 52
Corks	10,587 98
Cotton goods	939 08
Drugs and medicines	22,114 78
Dye stuffs	12,552 11
Feathers and flowers, artificial	7,465 66
Furniture and cabinet woods	3,036 30
Glass, porcelain, and potteries	100 00
Hair, human	1,206 78
Hardware, machinery, rails, and pig-iron	6,309 06
Horses and asses	33,605 00
India rubber	147,675 98
Jewelry and precious stones	6,142 31
Linen goods	2,393 42
Merinoes, cashemeres, and miscellaneous dress goods	14,608 26

Millstones, plaster, and cement	$14, 465 42
Miscellaneous	6, 462 52
Musical instruments	353 42
Oils	3, 143 50
Paints	27, 085 15
Preserved fruits and vegetables	8, 969 10
Preserved meats and sardines	1, 125 [illegible]
Rags and old paper	700 00
Silk and velvet piece goods	427 77
Sugar and confectionery	7, 243 23
Toilet articles and perfumery	39, 429 6[illegible]
Willows	1, 844 12
Wines and liqueurs	21, 654 56
Wool	109 29
Total	414, 507 41

JOHN B. GLOVER,
Consul.

LA ROCHELLE AND AGENCY.

(Agency: Limoges.)

Quarter ending March 31, 1883.

Brandy	$287, 433 7[illegible]
Porcelain and pottery	214, 536 17
Stationery	3, 344 66
Straw goods	446 66
Total	505, 871 13

Quarter ending June 30, 1883.

Brandy	$315, 516 00
Glass, porcelain, and pottery	271, 349 30
Stationery	2, 718 14
Total	589, 583 44

GEORGE GIFFORD,
Consul.

LYONS.

(No return.)

MARSEILLES AND AGENCIES.

Quarter ending March 31, 1883.

Articles.	Bastia.	Cette.	Marseilles.
Asphaltum			$2, 935 [illegible]
Beans			169, 175 [illegible]
Coffee			13, [illegible] 44
Confectionery and sugar	$2, 400 60		1, [illegible]
Chemicals:			
Glycerine			3, 270 [illegible]
Sulphur			2, 86[illegible]
Verdigris		$2, 130 29	2, 436 [illegible]
Drugs and medicines:			
Argols			31, 090 [illegible]
Drugs, and medicinal plants		3, 223 48	1, 618 [illegible]
Dyeing stuffs, cochineal, and saffron		583 52	2, 133 [illegible]
Gypsum, talc, and lime			4, 861 [illegible]
Hair, animal			5, 336 [illegible]
Hats, straw			1, 532 [illegible]
Hides and goat skins, raw and tanned			70, 173 [illegible]
India rubber			1, 954 [illegible]
Pig-iron			6, 775 [illegible]
Miscellaneous		1, 790 92	3, 041 [illegible]
Nuts:			
Almonds			33, 325 [illegible]
Walnuts and filberts			7, 184 [illegible]
Oils:			
Olive			41, 461 [illegible]
Sesame and other			18, [illegible]
Paints and varnishes:			
Ocher, &c			3, [illegible]

Quarter ending March 31, 1883—Continued.

Articles.	Bastia.	Cette.	Marseilles.
Perfumery, pomatum and essences for			$27,623 67
Preserved fruit and vegetables:			
Capers and olives			2,088 74
Dates			2,077 83
Rags			1,411 26
Salt		$1,015 65	8,686 47
Seeds, plants, and flowers:			
Canary seed and other			13,382 45
Thistles, immortelles, &c			1,885 71
Silk, raw			9,301 66
Soap, ordinary			19,122 23
Terra alba		6,021 69	
Wines and liqueurs:			
Ordinary wine		26,794 21	18,583 94
Vermouth			13,157 96
Liqueurs			5,031 61
Wood:			
Walnut burrs			59,079 91
Wool			43,295 45
Total	$2,400 60	41,559 76	653,682 66

Quarter ending June 30, 1883.

Articles.	Toulon.	Cette.	Marseilles.
Beans			$32,266 00
Confectionery			1,382 70
Chemicals:			
Glycerine			55,995 57
Verdigris		$3,928 34	4,220 38
Drugs and medicines:			
Argols			24,872 30
Gums and other drugs		10,242 14	
Medicinal roots, herbs, peels, &c			1,152 51
Dyeing stuffs:			
Garancine (madder)			8,284 85
Gypsum, lime, talc, &c			2,681 82
Hair, cattle			5,661 43
Hides and goat skins, salt and tanned			78,177 50
India rubber			12,727 41
Pig-iron			16,307 50
Miscellaneous		230 00	3,433 27
Nuts:			
Almonds			4,736 78
Filberts			8,638 46
Walnuts		341 34	18,017 27
Nutmegs			4,929 54
Ocher			976 31
Oils:			
Olive			40,636 75
Sesame			8,923 58
Opium			2,668 15
Perfumery, essences and extracts for			12,805 35
Plants and seeds:			
Teasels, immortelles, bulbs, roots, &c	$2,741 50		2,429 25
Seeds of all description		260 00	1,759 93
Preserved vegetables and fruit:			
Truffles, capers, olives, raisins	1,851 74		2,231 89
Rags			1,315 94
Salt	1,842 08	3,649 00	3,763 47
Silk, raw			6,740 24
Soap, ordinary			24,020 13
Terra alba, albuminous		3,740 00	
Wines and liqueurs:			
Wine, ordinary		28,191 10	27,528 78
Varmouth			17,917 61
Liqueurs			6,830 90
Wood:			
Walnut burrs			40,521 57
Wool			47,546 11
Total	6,435 32	50,582 01	482,101 35

H. A. TAYLOR,
Consul.

NANTES AND AGENCIES.

(Agencies: L'Orient and St. Nazaire.)

Quarter ending March, 31, 1883.

Nantes:		
Boots and shoes and leather	$403 78	
Preserved vegetables and sardines	9,292 25	
Seeds and plants	27,645 72	
Wine	635 80	
		$37,97
Saint Nazaire Agency:		
Ore, iron	740 50	
Wine	20 00	
		76
L'Orient Agency:		
Preserved vegetables and sardines		4,90
Total		43,64

Quarter ending June 30, 1883.

Machinery	$60
Preserved vegetables	36
Preserved sardines	21,81
Seeds	9
Wine	55
Total	23,44
Nantes	5,99
Saint Nazaire	28
L'Orient (sardines)	17,16
Total	23,44

THOMAS WILSON,
Consu

NICE AND AGENCIES.

(Agencies: Cannes, Mentone, and Monaco.)

NICE.

Quarter ending March 31, 1883.

Glass, porcelain, and potteries	$25
Toilet articles and perfumery	29,79
Total	30,04

GEORGE F. MOSHER,
Consu

Quarter ending June 30, 1883.

	Fran
Pomade and essence	4,96
Toilet water and oil	1,05
Toilet water	2,81
Antique furniture	4,34
Pomade	9,96
Oil (olive)	1,44
Oil	4,39
Household effects	9,42
Essence	48,63
China (old) and antique furniture	6,59
Potteries	1,85
Powder (poudre) and extracts	12,89
Oil and pomade	5,17
Total	113,55
Total	$21,915

W. F. ROWLAND,
Consu

CANNES AGENCY.

Quarter ending June 30, 1883.

Glass, porcelain and potteries	$344 50
Toilet articles and perfumery	976 50
Total	1,321 00

THEO. D. VALCOURT,
Consular Agent.

PARIS.

Quarter ending March 31, 1883.

Albumen	$3,860
Argols and cream of tartar	105,170
Art, works of	129,725
Books and engravings	95,996
Boots, shoes and leather manufactures	22,295
Brandy	4,197
Bristles	25,068
Buttons and trimmings	654,856
Calf skins, leather, and hides	1,039,269
Carriages	1,181
Chemicals	184,621
Church ornaments and metallic trimmings	10,494
Clocks and watches	37,808
Corsets	40,062
Costumes and dresses	76,365
Cotton goods	126,669
Drugs and medicines	5,294
Dye stuffs	67,180
Fancy goods	542,311
Feathers and flowers, artificial and millinery	797,669
Furniture and cabinet woods	9,377
Glass, porcelain and potteries	92,438
Gloves	199,990
Glue	30,701
Hair, human	31,446
Hardware, machinery, rails, and pig-iron	28,727
Hats and hatters' goods and furs	238,167
Horses and asses	19,686
Hosiery	358,585
India-rubber	807
Jewelry and precious stones	737,831
Laces and tulles	811,007
Linen goods	90,509
Merinos, cachemires and miscellaneous dress goods	5,478,355
Miscellaneous	63,538
Musical instruments	39,920
Oils	2,563
Optical and scientific instruments	158,151
Platinum	22,776
Paints	30,461
Preserved fruits and vegetables	54,201
Preserved meat and sardines	8,511
Prunes, raisins, nuts, &c	4,413
Rags and old paper	13,205
Seeds and plants	31,876
Shawls	19,969
Silk and velvet piece goods	25,577
Silk and velvet ribbons	19,969
Soap, ordinary, and soap grease	16,459
Sponges	3,568
Stationery	11,516
Straw goods	47,058
Sugar and confectionery	2,439
Tobacco	207
Toilet articles and perfumery	151,543
Upholstery goods and wall paper	578,551
Whalebone	53,576
Wines and liqueurs	11,181
Woolen cloth	107,570
Total	13,576,514

Quarter ending June 30, 1883.

Albumen	$
Argols and cream of tartar	184,
Art, works of	577,
Books and engravings	67,
Boots, shoes, and leather manufactures	22,
Brandy	
Bristles	22.
Buttons and trimmings	389,
Calf skins, leather, and hides	947,
Carriages	9,
Chemicals	144.
Church ornaments and metallic trimmings	25,
Clocks and watches	42,
Corsets	44,
Costumes and dresses	68,
Cotton goods	58,
Drugs and medicines	7,
Dye stuffs	119,
Fancy goods	419,
Feathers and flowers, artificial and millinery	347,
Furniture and cabinet woods	113,
Glass, porcelain, and potteries	228,
Gloves	56,
Glue	16,
Hair, human	26,
Hardware, machinery, rails, and pig-iron	84,
Hats, hatters' goods and furs	326,
Horses and asses	159,
Hosiery	190,
India-rubber	
Jewelry and precious stones	1, 160,
Laces and tulles	310,
Linen goods	44,
Merinos, cachemires, and miscellaneous dress goods	3, 396,
Miscellaneous	56,
Musical instruments	46,
Oils	
Optical and scientific instruments	156,
Platinum	33,
Paints	39,
Preserved fruits and vegetables	8,
Preserved meat and sardines	20,
Prunes, raisins, nuts, &c	
Rags and old paper	8,
Seeds and plants	1,
Shawls	32,
Silk and velvet piece goods	7,
Silk and velvet ribbons	11,
Soap, ordinary, and soap grease	37,
Sponges	
Stationery	13,
Straw goods	5,
Sugar and confectionery	2,
Tobacco	
Toilet articles and perfumery	156,
Upholstery goods and wall paper	370,
Whalebone	43,
Wines and liqueurs	16,
Woolen cloth	73,
Total	10, 811,

GEORGE WALKER,
Consul-Genera

RHEIMS.

Quarter ending March 31, 1883.

Buttons and trimmings	$987
Corks	2, 542
Corsets	952
Merinoes, cashmeres, and miscellaneous dress goods	107, 220

Miscellaneous	$1,699 95
Willows	11,730 77
Wines and liquors	829,771 41
Total	954,904 46

Quarter ending June 30, 1883.

Buttons and trimmings	$688 88
Corsets	509 44
Dye-stuffs	3,647 28
Hardware, machinery, rails, and pig-iron	7,627 25
Merinoes, cashmeres, and miscellaneous dress goods	134,588 72
Miscellaneous	1,764 52
Preserved fruits and vegetables	1,754 82
Sugar and confectionery	1,038 48
Willows	8,169 42
Wines and liquors	1,524,245 48
Total	1,684,034 29

JOHN L. FRISBIE,
Consul.

ROUEN AND AGENCIES.

(Agencies: Bologne-Sur, Calais, Dieppe, Dunkirk, Lille, and Roulaix.)

ROUEN.

Quarter ending March 31, 1883.

Laces and tulles	$449,619 07
Merinoes, cashmeres, and miscellaneous dress goods	141,631 62
Upholstery goods and wall paper	65,433 53
Furniture and cabinet woods	20,607 00
Linen goods	15,868 16
Toilet articles and perfumery	12,170 32
Woolen cloth	8,437 90
Wool	7,774 00
Horses and asses	7,584 00
Willows	2,785 30
Glass, porcelain, and potteries	2,668 00
Ores	1,474 68
Chemicals	1,259 00
Glue	1,064 89
Hosiery	986 00
Hardware, machinery, rails, and pig-iron	428 00
Miscellaneous	1,970 62
Total	741,753 04

A. RHODES,
Consul.

Quarter ending June 30, 1883.

Utrecht velvet	$65,738 67
Woolen cloth	26,290 24
Cashmere	169,923 76
Horses for breeding purposes	33,888 00
Toilet articles	11,101 87
Willows	2,430 64
Liquor	470 10
Wool	22,462 00
Carpets	304 00
Linen goods	2,625 82
Flax	1,701 00
Laces and tulles	289,583 02
Chemicals	4,098 00
Furniture	20,132 00
Glass	674 00
Vegetable fiber	147 60
Miscellaneous articles	910 00
Total	652,480 72

CHAS. P. WILLIAMS,
Consul.

ST. ETIENNE.

Quarter ending March 31, 1883.

Silk (and mixed) ribbons	$84,221 [illegible]
Velvet ribbons	31,335 [illegible]
Elastic ribbons	296 [illegible]
Cravats (ladies')	1,730 [illegible]
Trimmings, braids, &c	16,564 [illegible]
Laces, tulles, &c	4,166 [illegible]
Cotton goods	2,407 [illegible]
Gloves (kid)	212,402 [illegible]
Kid and lamb skins	3,527 [illegible]
Miscellaneous	2,542 [illegible]
Total	359,196 [illegible]

Quarter ending June 30, 1883.

Pieces of silk and velvet goods	$619 [illegible]
Silk (and mixed) ribbons	81,562 [illegible]
Velvet ribbons	88,491 [illegible]
Elastic ribbons	190 [illegible]
Trimmings, braids, &c	24,089 [illegible]
Laces, tulles, &c	3,314 [illegible]
Cotton goods	22,297 [illegible]
Gloves	27,817 [illegible]
Kid and lamb skins	4,822 [illegible]
Miscellaneous	1,001 [illegible]
Total	254,806 [illegible]

THEODORE HERTZBERG,
Commercial Agent.

SWITZERLAND.

BASLE AND AGENCY.

[Agency: Chaux de Fonds.)

Quarter ending March 31, 1883.

Kind of goods.	First quarter of 1883.	Same period last year.	Increase.	Decrease.
Silk ribbons	$604, 155 90	$722, 668 75	....	$118,51[illegible]
Raw silk	54, 928 10	6, 733 75	$48, 194 35	....
Watches and watch materials	403, 437 10	526, 175 70	....	122,7[illegible]
Aniline colors	20, 899 90	41, 072 65	....	20,17[illegible]
Straw goods	7, 702 50	40, 462 10	....	32,7[illegible]
Miscellaneous goods	35, 564 65	171, 963 65	....	136,3[illegible]
Total	1, 126, 688 15	1, 509, 076 60	....	....
Net decrease as compared with the same period last year				382,3[illegible]

Quarter ending June 30, 1883.

Kind of goods.	Second quarter of 1883.	Same period last year.	Increase.	Decrease.
Silk ribbons	$385, 569 90	$377, 470 70	$8, 099 20	....
Raw silk	21, 745 70	24, 361 60	....	$2,615 [illegible]
Watches and watch materials	378, 591 40	404, 870 00	....	26,278 [illegible]
Aniline colors	15, 913 95	37, 641 55	....	21,727 [illegible]
Miscellaneous goods	44, 043 40	326, 913 05	....	282,869 [illegible]
Total	845, 864 35	1, 171, 256 90	....	....
Net decrease as compared with the same period last year				325,392 [illegible]

FRANK H. MASON,
Consul.

BERNE.

Quarter ending March 31, 1883.

Cheese	$112,722 93
Silk tissues	25,287 66
Straw and cotton goods	39,857 54
Watches	1,768 44
Miscellaneous	830 94
Total	180,467 51

Quarter ending June 30, 1883.

Cheese	$164,629 58
Silk tissues	11,481 20
Watches and watch material	1,913 58
Straw goods	20,511 52
Wood carvings	859 14
Miscellaneous	1,948 93
Total	201,343 95

M. J. CRAMER,
Consul-General.

GENEVA AND AGENCY.

(Agency: Vevey.)

GENEVA.

Quarter ending March 31, 1883.

Watches, including materials for manufacture of	$62,990 55
Musical boxes	10,514 15
Leather	124,727 96
Files and gravers	3,098 15
Milk, products of	14,778 01
Wine and spirits	685 15
Miscellaneous	14,952 98
Total	231,746 97

Quarter ending June 30, 1883.

Watches, including materials for manufacture of	$84,849 29
Musical boxes	13,116 65
Patent leather	130,015 74
Files and gravers	20,855 70
Milk, products of	12,007 16
Wine and spirits	66 54
Miscellaneous	15,750 61
Total	276,661 69

LYELL T. ADAMS, *Consul.*

HORGEN.

Quarter ending March 31, 1883.

Silks and silk goods	$736,339 42
Bolting-cloth and embroideries	13,799 10
Wine, spirits, and cheese	1,327 49
Catholic devotional articles	12,016 21
Miscellaneous	1,946 13
Total	765,428 35

Quarter ending June 30, 1883.

Silk and silk goods	$393,603 53
Bolting-cloths and embroideries	15,848 51
Wine, spirits, and cheese	3,692 72
Catholic devotional articles	7,776 79
Miscellaneous	4,607 96
Total for fiscal year ending June 30, 1883	425,529 51
Value of declared exports during fiscal year ending June 30, 1882	402,820 98
Increase for fiscal year ending June 30, 1883	22,708 53

Aggregate yearly summary of exports for years ending respectively December 31.

	1879.	1880.	1881.	[illegible]
First quarter	$884, 241 06	$661, 426 67	$476, 254 85	[illegible]
Second quarter	516, 654 31	319, 598 68	320, 773 60	[illegible]
Third quarter	703, 878 15	488, 767 52	566, 432 21	[illegible]
Fourth quarter	584, 076 07	434, 612 66	444, 878 71	[illegible]
Total	2, 688, 849 59	1, 904, 405 53	1, 808, 339 37	[illegible]

WILLIAM T. RICE, *Consul.*

ST. GALLE.

Year ending June 30, 1883.

Articles.	Quarters ending— September 30, 1882.	December 31, 1882.	March 31, 1883.	June 30, 1883.	Total.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Embroidered goods:					
Hamburg trimmings, white and colored foundation.	4, 562, 257 89	10, 521, 785 14	8, 600, 608 91	4, 537, 236 90	28, 221, 888 84
Tamboured lace curtians, vestibules, &c.	508, 564 00	370, 705 00	304, 566 84	219, 571 12	1, 403, 406 96
Handkerchiefs, ties, colors, dresses, and other fancy articles.	443, 168 00	238, 371 00	1, 434, 910 81	625, 346 16	2, 481, 795 97
Cotton goods:					
Loom trimmings, in cotton	32, 978 00	269, 524 00	325, 084 28	18, 253 17	245, 839 45
Half linen loom trimmings and dress goods.	21, 493 00	5, 823 00	....	3, 879 40	31, 195 40
Fancy articles:					
Toggenburgh articles	7, 023 00	39, 602 00	11, 139 70	15, 356 36	73, 121 06
Printed handkerchiefs, &c., white foundation.	1, 709 83	....	....	....	1, 709 83
Piece goods:					
Plain muslin	3, 327 00	33, 213 00	36, 883 70	13, 843 98	87, 267 68
Figured and dotted Swiss, &c.	74, 421 00	782, 475 00	554, 544 83	5, 423 73	1, 416, 863 [illegible]
Silk goods:					
Piece goods	288, 057 00	186, 280 00	142, 868 69	245, 491 05	862, 696 74
Ribbons	31, 256 00	14, 059 00	10, 299 00	38 00	55, 652 00
Embroidered articles, robes and robe trimmings, on cashmere and silk.	706, 733 00	172, 827 00	240, 384 50	11, 754 30	1, 131, 618 80
Miscellaneous:					
Iron-yarn goods	6, 456 00	52, 335 00	11, 578 65	1, 209 00	71, 578 65
Provisions (including condensed milk).	1, 647 00	12, 241 00	4, 499 95	7, 677 00	27, 061 95
Sundries (including embroidery machines).	68, 017 00	31, 344 00	19, 884 50	4, 933 40	124, 175 [illegible]
Total in francs	6, 757, 107 72	12, 731, 581 14	11, 697, 174 36	5, 450, 013 57	36, 635, 876 79
Total in United States gold coin	1, 304, 121 78	2, 457, 195 16	2, 257, 553 64	1, 151, 852 61	7, 070, 723 [illegible]
Total for the preceding year	....	....	....	....	5, 150, 689 11
ncrease	....	....	....	....	1, 920, 033 [illegible]

EMORY P. BEAUCHAMP,
Consul.

ZURICH.

Quarter ending March 31, 1883.

Silk goods, raw silk, and silk bolting-cloth	$751, 498 [illegible]
Straw goods, hemp and bast plaits, &c	89, 018 [illegible]
Miscellaneous	14, 239 [illegible]
Total	854, 756 [illegible]

JOHN SYZ,
Vice-Consul.

Quarter ending June 30, 1883.

Silk goods	$393,085 98
Straw goods	10,249 12
Miscellaneous	13,234 21
Total	416,569 31
Same period in 1882, including Horgen, which is reported separately since 1st July, 1882	1,164,883 12

S. H. M. BYERS,
Consul.

GIBRALTAR.

Quarter ending March 31, 1883.

Carpets	$44 50
Household effects	488 10
Moorish curiosities	360 06
Portuguese crockery	129 43
Total	1,022 09

Quarter ending June 30, 1883.

Moorish curiosities and rugs	$479 58
Gum	282 31
Skins and hides	179 63
Total	941 52

HORATIO J. SPRAGUE,
Consul.

SPAIN.

ALICANTE.

(No returns.)

BARCELONA AND AGENCIES.

(Agencies: Grao, Palma, Port Mahon, Tarragona, and Torrevieja.)

Quarter ending June 30, 1883.

Articles.	Barcelona.	Tarragona Agency.	Grao Agency.	Torrevieja Agency.	Total.
Wine	$790 77	$44,176 85	$31,138 88		$76,106 50
Corks	12,783 40				12,783 40
Books	299 20				299 20
Almonds		8,510 10			8,510 10
Oranges			198,048 95		198,048 95
Raisins			3,003 55		3,003 55
Saffron			2,309 20		2,309 20
Salt				$21,000 00	21,000 00
Miscellaneous			851 00		851 00
Total	13,873 37	52,686 95	235,851 58	21,000 00	322,911 90

FREDK. H. SCHEUCH,
Consul.

CADIZ AND AGENCIES.

(Agencies: Algeciras, Huelva, Jeres de la Frontera, San Luca de Barrameda, and Seville.)

CADIZ.

Quarter ending March 31, 1883.

Wines	$189,504	[illegible]
Cork and corkwood	93,691	[illegible]
Olives	11,816	[illegible]
Sundries	11,231	29
Iron ore	10,563	[illegible]
Cupreous sulphur ore	9,480	[illegible]
Salt	8,059	[illegible]
Olive oil	4,148	[illegible]
Licorice paste	3,048	[illegible]
Total	341,542	60

Quarter ending June 30, 1883.

Wines	$388,556	71
Salt	17,272	[illegible]
Cork and corkwood	37,466	[illegible]
Olives	8,457	14
Licorice paste	10,889	[illegible]
Sundries	13,711	[illegible]
Total	476,354	74

ERNEST L. OPPENHEIM,
Consul.

CORRUNNA AND AGENCIES.

(No returns.)

DENIA.

(No returns.)

GARRUCHA.

(No returns.)

MADRID.

(No returns.)

MALAGA AND AGENCIES.

(Agencies: Adra, Almeria, Granada, and Port of Marbella.)

MALAGA.

Quarter ending March 31, 1883.

Raisins	$202,347	[illegible]
Palmleaf hats	21,938	[illegible]
Almonds	19,210	[illegible]
Wine	6,323	[illegible]
Licorice root	5,090	[illegible]
Ergot	2,489	[illegible]
Olive oil	1,350	[illegible]
Orange peel	1,033	57
Sundries	763	[illegible]
Colocynth	526	[illegible]
Raisin papers	243	76
Brandy	135	[illegible]
Total	261,453	[illegible]

Quarter ending June 30, 1883.

Raisins	$59,127 31
Licorice paste	13,454 10
Palmleaf hats	9,368 88
Wine	8,265 30
Almonds	2,040 14
Orange peel	915 64
Sundries	565 72
Models	211 33
Earthenware	75 72
Total	94,024 14

H. C. MARSTON,
Consul.

SANTANDER AND AGENCIES.

(Agencies: Bilbao, Gijon, and San Sebastian..

SANTANDER.

Quarter ending March 31, 1883.

Iron ore, 2,330 tons	$4,670 00

Quarter ending June 30, 1883.

Iron ore, 3,284 tons	$6,406 00

RAMON DE CASUSO,
Acting Consul.

PORTUGAL.

LISBON AND AGENCIES.

(Agencies: Faro, Oporto, and Setubal.)

LISBON.

Quarter ending March 31, 1883.

Corkwood	$220,863 51
Sardines	5,577 72
Iron ore	7,755 57
Salt	5,736 70
Wax	7,710 99
Coffee	5,860 99
Gum copal	5,045 41
Wine	381 90
Crude rubber	368 71
Total	259,301 50

Quarter ending June 30, 1883.

Corkwood	$197,981 12
African beeswax	22,323 69
Salt	20,569 74
Corks	7,436 94
Sardines	6,930 69
Gum copal	4,329 83
Iron ore	4,565 35
Elephant's tusks	1,308 57
Wine	684 03
Total	266,129 96

JOHN M. FRANCIS,
Consul-General.

THE AZORES.

Quarter ending March 31, 1883.

Straw braid and hats	$3,144 95
Old metal	431 75
Fruit (oranges)	288 06
Embroideries	241 05
Miscellaneous	87 42
Wine	62 24
Total	4,255 60

Quarter ending June 30, 1883.

Straw hats and braid	$2,506 11
Old metal	513 25
Embroideries	443 32
Total	3,462 68

S. W. DABNEY,
Consul.

ITALY.

BRINDISI.

(No return.)

CASTELAMARE.

Quarter ending March 31, 1883.

Green fruit	$70,305 79
Macaroni	12,446 31
Wine	967 00
Olive oil	295 69
Total	84,014 79

Quarter ending June 30, 1883.

Green fruit	$51,824 71
Macaroni	13,585 73
Wine	804 80
Cheese	246 00
Total	66,461 24

A. M. WOOD,
Commercial Agent.

FLORENCE AND AGENCY.

(Agency: Cagliari.)

FLORENCE.

Quarter ending March 31, 1883.

Straw goods	$493,595 19
Pictures	6,087 77
Marble statuary	14,920 95
Alabaster works	432 00
Mosaics	782 50
Wine	296 31
Borax	1,326 53
China and majolica	215 95
Soap	3,239 05
Skins	662 12
Furniture	3,892 20
Total	525,451 57

Quarter ending June 30, 1883.

Straw goods	$258,264 91
Pictures	53,523 72
Marble statuary	37,523 45
Alabaster works	1,381 11
Mosaics	8,144 79
Furniture and antiquities	7,135 27
China and earthen ware	1,949 62
Borax	1,306 78
Olive soap	852 40
Miscellaneous	1,132 62
Total	371,214 67

WM. L. WELSH,
Consul.

CAGLIARI AGENCY.

Quarter ending March 31, 1883.

Marine salt	$1,503 40

Quarter ending June 30, 1883.

Marine salt	$14,464 68
Unwashed wool	13,563 45
Total	28,028 13

ALPHONSE DOL,
Consular Agent.

GENOA AND AGENCY.

(Agency: Spezia.)

GENOA.

Quarter ending March 31, 1883.

Cheese	$7,102 38
Chestnut extract	1,949 71
Citron, candied	2,847 19
Filigree	4,037 01
Fruit, dried	173 70
Herbs, medicinal (*Hepatica nobilis*)	1,752 60
Macaroni	11,904 82
Marble work	201 22
Milk, condensed	4,637 03
Molds, copper, for macaroni	45 80
Oakum	4,095 71
Oil, olive	2,830 53
Oil, sesame	2,923 32
Paper	1,297 62
Rags	4,476 47
Rice	2,357 54
Roots, rice	5,480 30
Roots, gentian	860 88
Sausage of Bologna	905 63
Slate	363 80
Soap	808 00
Velvet	33 60
Water, mineral	133 00
Wermuth	466 36
Wine, all kinds	6,427 77
Miscellaneous	480 11
Total	68,592 10

J. F. HAZELTON,
Consul.

Quarter ending June 30, 1883.

Barrels, empty petroleum	$1,400 00
Cheese	3,524 35
Citron, candied	6,041 02
Filigree	1,660 13
Furniture	332 50
Macaroni	4,260 61
Mushrooms, truffles, pease, and tomato sauce	569 06
Molds, copper, for macaroni	462 00
Oil, olive	6,432 00
Pictures, oleographic	667 30
Rags	4,910 00
Rice	1,219 0[illegible]
Roots, rice	4,323 0[illegible]
Roots, briar, gentian, and medicinal	300 00
Salt	1,156 30
Sausage of Bologna	934 00
Shell work	325 0[illegible]
Soap, common	231 50
Stubble	1,203 06
Talc, powdered, white stone	2,369 5[illegible]
Tamarind, extract	300 00
Tunny in oil	242 00
Umbrellas, silk	265 00
Vermouth	765 00
Wines, all kinds	5,585 00
Miscellaneous	1,771 00
Total	51,228 14

A. P. FRANCIA,
Vice-Consul.

LEGHORN AND AGENCIES.

(Agencies: Bologna and Carrara.)

LEGHORN.

Quarter ending March 31, 1883.

Alabaster works	$4,211 65
Argols	18,080 17
Briar wood	2,361 17
Boracic acid	40,213 66
Bees-wax	1,548 55
Buttons (corozo nut)	1,210 22
Candied citrons	54,582 65
Cheese	741 77
Coral (manufactured)	550 22
Fine arts	229 [illegible]
Gentian root	306 [illegible]
Hemp	1,322 [illegible]
Iron ore	15,390 [illegible]
Juniper berries	1,574 13
Marble, in blocks	103,370 [illegible]
Marble, worked	6,532 1[illegible]
Marble, statuary	8,332 1[illegible]
Olive oil	28,209 91
Orris root	1,470 23
Pumice-stone	4,757 11
Pumice-stone bricks	405 65
Rags	47,380 4[illegible]
Soap	30,472 4[illegible]
Soap stock	16,705 83
Sienna earth	4,761 0[illegible]
Sausages	64 1[illegible]
Umber earth	492 96
Wine	3,243 2[illegible]
Miscellaneous	271 73
Total	399,080 81

Quarter ending June 30, 1883.

Alabaster works	$4,301	87
Argols	10,975	88
Briar wood	1,266	39
Boracic acid	75,674	01
Bees-wax	814	35
Buttons (corozo nut)	1,210	32
Candied citrons	69,897	97
Chalk	105	68
Cheese	253	79
Fine arts	540	40
Furniture	1,640	50
Hemp	6,679	99
Iron ore	11,415	95
Juniper berries	439	57
Marble, block	76,558	19
Marble, worked	7,441	45
Marble, sawed	1,333	17
Marble, statuary	14,942	98
Olive oil	28,108	13
Orris root	1,857	67
Pumice-stone	7,073	09
Rags	40,615	32
Soap	37,759	84
Soap stock	5,571	76
Sienna earth	2,609	81
Talc	596	69
Umber earth	3,771	55
Wine	6,595	69
Miscellaneous	244	34
Total	420,296	35

CHAS. P. BARNARD,
Consul.

BOLOGNA AGENCY.

Quarter ending March 31, 1883.

Hemp	$12,863	60
Rags	19,303	26
Rice-straw plaitings	14,079	35
Total	46,246	21

ZANOTTI ZUIGIZ,
Acting Consular Agent.

Quarter ending June 30, 1883.

Hemp	$21,530	84
Medicines	313	62
Sausages	568	01
Total	22,412	47

CARLO GARDINI,
Consular Agent.

CARRARA AGENCY.

Quarter ending June 30, 1883.

147 blocks of marble, 15,788 cubic palms	$10,562	00
371 slabs of marble, 769 cubic feet	1,450	00
37 cases worked marble	730	00
30 cases marble statuary	5,122	00
Miscellaneous	8	00
Total	17,872	00

ULISSE BOCCACCI,
Consular Agent.

MESSINA AND AGENCIES.

(Agencies: Gioja, Milazzo, and Syracuse.)

MESSINA.

Quarter ending March 31, 1883.

Argols	$3,145 00
Almonds	5,295 00
Asphaltum	1,006 71
Brimstone	204,871 16
Canary seed	18,681 64
Cheese	2,200 03
Dates	200 00
Essences	63,403 68
Filberts	7,150 90
Fruit, lemons and oranges	1,060,215 15
Lemon juice, concentrated	3,439 00
Licorice root	5,575 00
Olive oil	5,617 00
Pistachio kernels	420 00
Sumac	5,138 70
Silk	4,642 00
Soap stock	1,619 00
Tomato paste	224 06
Wine	996 00
Miscellaneous	530 00
Total	1,394,370 07

GEO. H. OWEN,
Consul.

Quarter ending June 30, 1883.

Almonds	$3,471 00
Brimstone	140,589 90
Cheese	516 10
Essences	69,895 48
Filberts	19,116 78
Fruit (lemons and oranges)	335,698 77
Licorice paste	2,598 50
Olive oil	4,667 85
Sumac	6,363 30
Shoes	400 00
Wine	320 00
Total	583,637 66

LETTERIO PIRRONE,
Vice-Consul.

MILAN.

Quarter ending March 31, 1883.

Aquarella paintings	$135 10
Cheese	4,383 85
Gloves	43,777 01
Household effects	540 40
Liqueurs	2,084 39
Manufactured silk	30,059 49
Medicinal preparations	304 16
Miscellaneous	1,340 76
Quinine	3,474 25
Raw silk	420,977 23
Statuary	405 30
Straw for brushes	1,196 45
Straw braids for hats	1,159 93
Total	509,838 32

Quarter ending June 30, 1883.

Aquarella paintings	$1,116 50
Cheese	1,621 10
Gloves	36,877 55
Liqueurs	964 03
Manufactured silk	19,647 90
Oil paintings	96 50
Raw silk	476,298 76
Rice root	939 12
Statuary	4,698 58
Miscellaneous	2.171 79
Total	544,431 83

DUNHAM J. CRAIN,
Consul.

NAPLES AND AGENCIES.

(Agencies: Bari and Rodi.)

NAPLES.

Quarter ending March 31, 1883.

Argols	$67,486 86
Gloves	54,004 49
Rags	36,003 88
Fruit	19,485 34
Licorice	13,724 57
Olive oil	12,431 89
Tartar	4,364 26
Sundries	4,260 55
Wine	2,184 50
Human hair	1,814 71
Macaroni	1,591 46
Olio al solfuro	868 74
Total	218,221 25

Quarter ending June 30, 1883.

Argols	$50,347 27
Rags	28,637 01
Gloves	14,390 47
Olive oil	4,347 24
Bronzes (works of art)	4,068 88
Sundries	3,748 96
Licorice	3,424 75
Wine	2,326 65
Garlic	1,320 36
Soap stock	909 65
Macaroni	883 39
Human hair	500 20
Total	114,906 83

B. O. DUNCAN,
Consul.

PALERMO AND AGENCIES.

(Agencies: Carini, Girgenti, Licata, Marsala, Terranova, and Trapani.)

PALERMO.

Quarter ending March 31, 1883.

Brimstone	$116,129 00
Canary seed	2,393 00
Cosmetics	1,765 00
Filberts	5,699 00

Fruits	567,957 00
Manna	1,666 00
Macaroni	3,723 00
Oil of lemons	5,129 00
Sumac	87,942 00
Wine	1,899 00
Miscellaneous	2,439 00
Total	796,741 00

Quarter ending June 30, 1883.

Brimstone	$104,788 00
Cosmetics	943 00
Fruits	780,865 00
Filberts	5,605 00
Macaroni	2,853 00
Manna	3,418 00
Sumac	74,516 00
Wine	2,556 00
Miscellaneous	1,940 00
Total	977,484 00

S. P. BAYLY,
Consul.

CARINI AGENCY.

Quarter ending June 30, 1883.

Fruits	$54,428 75

A. BARBARA,
Consular Agent.

GIRGENTI AGENCY.

Quarter ending March 31, 1883.

Brimstone	$5,569 20
Do	12,994 59
Do	10,006 60
Do	10,939 50
Do	7,381 40
Do	7,666 66
Do	11,072 16
Do	12,984 59
Total	78,615 02

Quarter ending June 30, 1883.

Brimstone	$14,205 69
Do	14,169 62
Do	14,255 10
Do	12,844 94
Do	35,208 00
Total	90,693 35

LEWIS GRANET,
Consular Agent.

LICATA AGENCY.

Quarter ending March 31, 1883.

Brimstone	$70,399 5[illegible]

Quarter ending June 30, 1883.

Brimstone	$38,247 12

MICHAEL VERDERAME,
Consular Agent.

MARSALA AGENCY.

Quarter ending March 31, 1883.

Wines	$2,041 04

Quarter ending June 30, 1883.

Wines	$8,039 50
Olive oil	206 55
Total	8,246 05

GEO. RAYSON,
Consular Agent.

TRAPANI AGENCY.

Quarter ending March 31, 1883.

Salt	$22,954 30

Quarter ending June 30, 1883.

Salt	$27,370 29

LEONARDO MARRONE,
Consular Agent.

ROME AND AGENCIES.

(Agencies: Ancona and Civita Vecchia.)

ROME.

Quarter ending March 31, 1883.

Books and engravings	$676 47
Bronzes	2,576 26
Furniture and frames	616 16
Majolica ware and potteries	273 29
Marble, wrought	1,910 12
Marble, statuary	4,142 36
Mosaics	409 74
Paintings, oil and water color	2,998 48
Sienna earth	66 20
Tapestries and stuffs	332 95
Wine	405 30
Miscellaneous	39 57
Total	14,446 90

Quarter ending June 30, 1883.

Books, photographs, and engravings	$1,014 79
Bronzes	3,788 40
Furniture and frames	1,364 12
Majolica ware, porcelain, and potteries	3,045 35
Marble, wrought	2,224 52
Marble statuary	16,779 81
Mosaics	799 02
Paintings, oil and water color	20,385 82
Plaster casts	411 67
Sienna earth	637 48
Tapestries, rugs, stuffs, and sacred vestments	2,211 39
Wine	2,275 28
Miscellaneous	758 49
Total	55,696 14

LEWIS RICHMOND,
Consul-General.

ANCONA AGENCY.

Quarter ending March 31, 1883.

Asphaltum	$1,960 00

TURIN.

Quarter ending March 31, 1883.

Raw silk	$28,800 55
Rice-straw plats	23,495 59
Vermouth	15,302 39
Gun stocks	140 79
Canned goods	50 75
Total	67,789 56

Quarter ending June 30, 1883.

Vermouth	$17,018 95
Raw silk	12,296 19
Rice-straw plats	2,907 54
Oil paintings	501 66
Lucifer wax matches	270 28
Organ-piano	84 92
Gunstocks	23 16
Total	33,102 67

LOUIS DE FERNEX,
Vice-Consul.

VENICE.

Quarter ending March 31, 1883.

Glassware and beads	$3,015 00
Carved wood and furniture	1,089 00
Paintings	2,890 00
Straw, manufactured	9,764 00
Hemp	10,739 00
Bronzes	639 00
Photographs	145 00
Statuary	230 00
Miscellaneous	273 00
Total	28,877 00

Quarter ending June 30, 1883.

Glassware and beads	$3,356 00
Carved wood and furniture	4,678 00
Paintings	3,070 00
Straw goods	5,134 00
Hemp	10,484 00
Bronzes	401 00
Instruments	160 00
Photographs	65 00
Jet goods	922 00
Miscellaneous	506 00
Total	28,805 00

McWALTER B. NOYES,
Consul.

MALTA.

(No returns.)

AUSTRIA-HUNGARY.

CONSULAR DISTRICTS AND AGENCIES.

Quarter ending March 31, 1883.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Amber, crude				$3, 973 94	$3, 973 94
Art, works of				1, 327 37	1, 327 37
Bed feathers	$39 48	$12, 651 79			12, 691 27
Beer		10, 368 94			10, 368 94
Books		1, 170 56			1, 170 56
Buttons		19, 388 82		338, 698 96	358, 087 78
Cloth and woolen goods	126 44	7, 615 68		20, 418 85	28, 160 97
Drugs and chemicals	187 90	1, 979 95	$21, 010 36	6, 203 49	29, 381 70
Fancy goods and jewelry		2, 266 50		35, 901 23	38, 167 73
Fans		1, 727 10		54, 506 61	56, 233 71
Fruits, dried	127, 127 32		613, 845 21	15, 292 33	756, 264 86
Furniture				11, 022 92	11, 022 92
Glassware		267, 797 29		713 15	268, 510 44
Gloves		8, 626 44		15, 982 47	24, 608 91
Gum			76, 672 01		76, 672 01
Hair, human		5, 041 37		384 14	5, 425 51
Hops		2, 907 20			2, 907 20
Insect-powder			18, 748 78		18, 748 78
Leather and skins		4, 847 43	13, 902 00	59, 911 56	78, 660 99
Lentils and beans	3, 285 41			9, 274 24	12, 559 65
Linen and cotton goods				142, 920 17	142, 920 17
Liquor	282 43			202 70	485 13
Mineral water	18, 858 35	3, 169 85			22, 028 20
Meerschaum, crude				17, 586 36	17, 586 36
Musical instruments		294 05		9, 806 93	10, 100 98
Oils	583 51		12, 168 34		12, 751 85
Ozokerite				6, 698 70	6, 698 70
Petroleum barrels, empty			53, 677 29		53, 677 29
Porcelain and pottery		23, 554 01		6, 212 74	29, 766 75
Seeds	284 74				284 74
Shawls				5, 760 52	5, 760 52
Silks and velvets		5, 540 88		29, 440 20	34, 981 08
Smokers' articles				25, 381 99	25, 381 99
Sponges			2, 654 86		2, 654 86
Tartar, crude				54, 628 25	54, 628 25
Tobacco			1, 193 00	124 75	1, 317 75
Toys and chipped goods		2, 274 48			2, 274 48
Umbrella fixtures				2, 332 69	2, 332 69
Wine	2, 371 86	310 39		3, 155 44	5, 837 69
Wool			7, 896 16		7, 896 16
Miscellaneous		5, 994 16	19, 079 16	6, 535 64	31, 608 96
Total	153, 147 44	387, 526 89	840, 847 17	884, 398 34	2, 265, 919 80
Total for same quarter, 1882	198, 045 02	513, 575 96	625, 327 00	802, 058 30	2, 139, 006 28
Increase			215, 520 17	82, 340 04	126, 913 52
Decrease	44, 897 58	126, 049 07			

JAMES RILEY WEAVER,
Consul-General.

Quarter ending June 30, 1883.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Amber, crude				$8, 259 06	$8, 259 06
Art, works of				4, 579 48	4, 570 48
Bed feathers		$20, 601 70			20, 601 70
Beer		11, 264 31			11, 264 31
Books		221 85			221 85
Buttons		18, 201 42		207, 456 73	225, 658 15
Cloth and woolen goods		8, 541 95		43, 696 75	52, 238 70
Drugs and chemicals		5, 550 32	$17, 924 87	17, 678 58	41, 153 77
Fancy goods and jewelry	$787 96	5, 094 67		57, 798 78	63, 681 41
Fans		709 86		10, 050 56	10, 760 42
Fruits, dried	17, 340 60		91, 709 35		109, 049 95
Furniture		1, 432 08		12, 629 07	14, 061 15
Glassware		353, 450 58		5, 682 35	359, 132 93
Gloves	79 55	3, 734 45		3, 504 51	7, 318 51
Gum			41, 963 73		41, 963 73
Hair, human		7, 920 70			7, 920 70

Quarter ending June 30, 1883—Continued.

Articles.	Budapesth.	Prague.	Trieste.	Vienna.	Total.
Insect powder			$16, 205 14		$16, 205 [illegible]
Iron and steel manufactures				$4, 259 82	4, 259 [illegible]
Leather and skins		$19, 930 69	442 82	32, 368 81	52, 742 [illegible]
Linen and cotton goods				111, 876 62	111, 876 [illegible]
Mineral water	$29, 849 63	7, 923 20			37, 772 [illegible]
Meerschaum, crude				14, 727 87	14, 727 [illegible]
Musical instruments		1, 091 63		12, 747 14	13, 838 [illegible]
Oils			1, 555 20		1, 555 [illegible]
Ozokerite				6, 046 59	6, 046 [illegible]
Petroleum barrels, empty			31, 787 75		31, 787 [illegible]
Porcelain and pottery		58, 076 57		12, 617 96	70, 694 [illegible]
Sardines			3, 720 71		3, 720 [illegible]
Seeds	291 60				291 [illegible]
Shawls				4, 557 44	4, 557 [illegible]
Silks and velvet		6, 801 96		68, 784 33	75, 586 [illegible]
Smokers' articles				36, 983 02	36, 983 [illegible]
Sponges			877 49		877 [illegible]
Tartar, crude				30, 095 97	30, 095 [illegible]
Tobacco			2, 508 98		2, 508 [illegible]
Toys		10, 730 90			10, 730 [illegible]
Wine	14, 049 20	441 14		2, 686 67	17, 177 [illegible]
Wool			11, 180 83		11, 180 [illegible]
Miscellaneous		2, 404 55	7, 591 71	2, 677 89	12, 674 [illegible]
Total	62, 398 54	544, 124 53	227, 468 58	711, 757 00	1, 545, 748 [illegible]
Total same quarter, 1882	115, 312 62	554, 098 51	449, 061 56	906, 983 82	2, 025, 456 [illegible]
Decrease	52, 914 08	9, 973 98	221, 592 98	195, 226 82	479, 707 [illegible]

WILLIAM HERZ,
Vice Consul-General.

VIENNA, *July* 16, 1883.

TURKEY.

CONSTANTINOPLE AND AGENCIES.

(Agencies: Adrianople, Dardanelles, Philoppopolis, Rustchuck, Salonica, and Trebizonde.)

CONSTANTINOPLE.

Quarter ending March 31, 1883.

Attar of roses	$14,746 [illegible]
Turkish embroideries and bazaar articles	9,557 [illegible]
Carpets and rugs	6,146 [illegible]
Wool (bed and carpet)	4,439 [illegible]
Silk	3,959 [illegible]
Gum tragacanth	3,571 [illegible]
Rags	2,071 [illegible]
Beans (Danube)	1,329 [illegible]
Tobacco (leaf)	1,766 [illegible]
Scammony	1,365 [illegible]
Goat-skins	524 [illegible]
Total	49,[illegible]

Quarter ending June 30, 1883.

Embroideries and Turkish bazaar articles	$22,8[illegible]
Rugs and carpets	17,962 [illegible]
Attar of roses	10,546 [illegible]
Tobacco and cigarettes	6,67[illegible]
Gum tragacanth	2,961 [illegible]
Wool (goat's and carpet)	1,0[illegible]
Walnut wood	932 [illegible]
Oil of geranium	129 [illegible]
Sundries	5,12[illegible]
Total	6[illegible],614 [illegible]

G. H. HEAP,
Consul-General.

GREECE.

PATRAS AND AGENCIES.

(Agencies: Cephalonia, Corfu, Piraeus, Syra, and Zante.)

PATRAS.

Quarter ending March 31, 1883.

Currants	$236,895 77

Quarter ending June 30, 1883.

Currants	$22,315 05

E. HANCOCK,
Consul.

ZANTE AGENCY.

Quarter ending March 31, 1883.

Currants	$41,395 62

ED. D. BARFF,
Acting Consular Agent.

ROUMANIA.

(No returns.)

POLYNESIA.

HAWAIIAN ISLANDS.

HONOLULU AND AGENCIES.

(Agencies: Hilo, Kahului, and Mahukona.)

HONOLULU.

Quarter ending March 31, 1883.

Sugar	$1,806,355 39
Rice	119,811 98
Hides and tallow	21,269 11
Whale oil	12,640 00
Bananas	8,788 79
Returned goods	7,211 80
Molasses	5,550 38
Opium	5,178 18
Coffee	1,216 81
Copra	293 94
Tobacco	273 50
Total	1,988,589 88

Quarter ending June 30, 1883.

Sugar	$2,562,852 68
Rice	171,233 60
Hides	26,197 89
Wool	12,494 50
Bananas	10,932 80
Molasses	7,995 64
Oil	4,160 00
Coffee	813 26
Copra	744 05
Awa root	200 00
Miscellaneous	10,182 10
Total	2,807,806 52

D. A. McKINLEY,
Consul.

KAHULUI AGENCY.

Quarter ending March 31, 1883.

Sugars	$171,55
Hides	3,11
Tallow	23
Total	174,91

Quarter ending June 30, 1883.

Sugar	$526,24
Hides	1,94
Tallow	11
Guava jelly	13
Total	528,44

A. F. HOPKE,
Consular Agent

SOCIETY ISLANDS.

TAHITI.

Quarter ending March 31, 1883.

Cotton, ginned, 73,229 kilograms	$32,95
Fungus, 10,448 kilograms	1,92
Mother of pearl shell, 25,647 kilograms	11,413
Tortoise shell, 51 kilograms	103
Vanilla beans, 153 kilograms	459
Desiccated cocoanut, 1,342 kilograms	136
Old metal, 98 kilograms	14
Old iron, 180 kilograms	4
Lime juice, 2,597 gallons	515
Salted hides, 132	330
Goat skins, 121	60
Ship's knees, 1,642	4,302
Cocoanuts, 141,000	2,736
Oranges, 750,000	3,375
Total value	58,32

Quarter ending June 30, 1883.

Cotton:	
Ginned, 111,507 kilograms	$49,473
Seed, 18,000 kilograms	144
Mother of pearl shell, 38,010 kilograms	17,01
Fungus, 4,249 kilograms	88
Soap stock, 20,000 kilograms	100
Vanilla beans, 241 kilograms	819
Desiccated cocoanut 855 kilograms	8
Old metal, 70 kilograms	11
Lime juice, 8,263 gallons	1,652
Rum, 15 gallons	20
Oranges, 1,156,000	5,467
Cocoanuts, 190,300	3,644
Tamanu logs, 261	1,005
Hides, 155	387
Goat skins, 261	130
Total	80,846

DORENCE ATWATER,
Consul

STANFORD UNIVERSITY LIBRARIES

STANFORD UNIVERSITY LIBRARIES